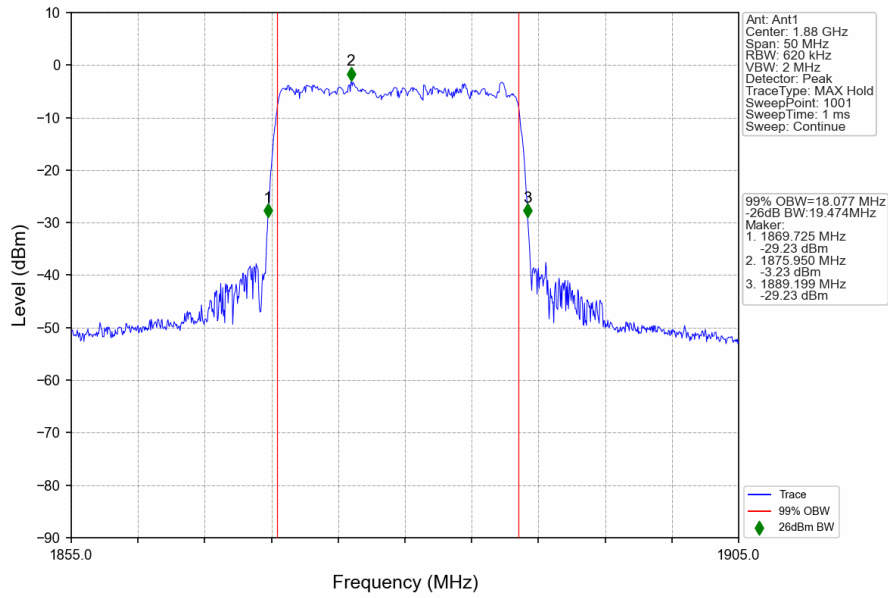
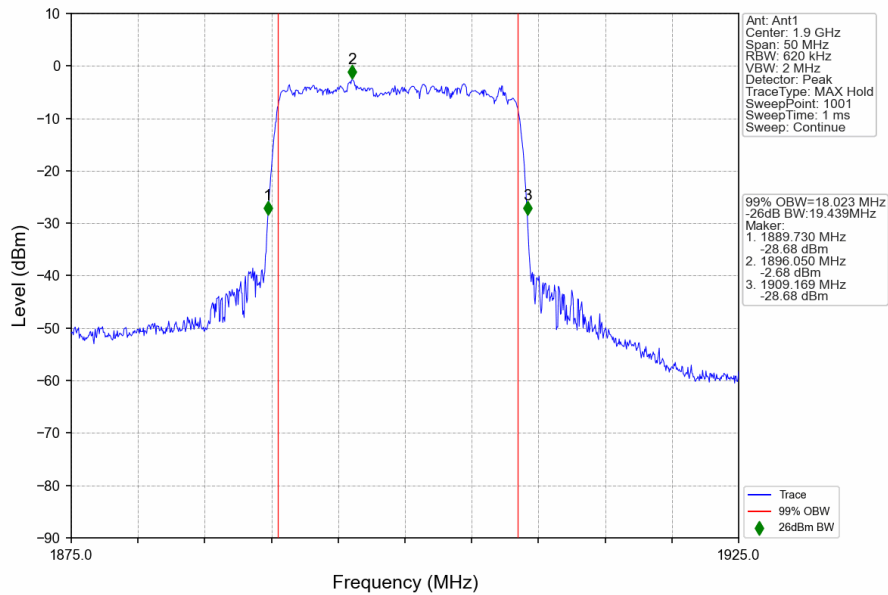


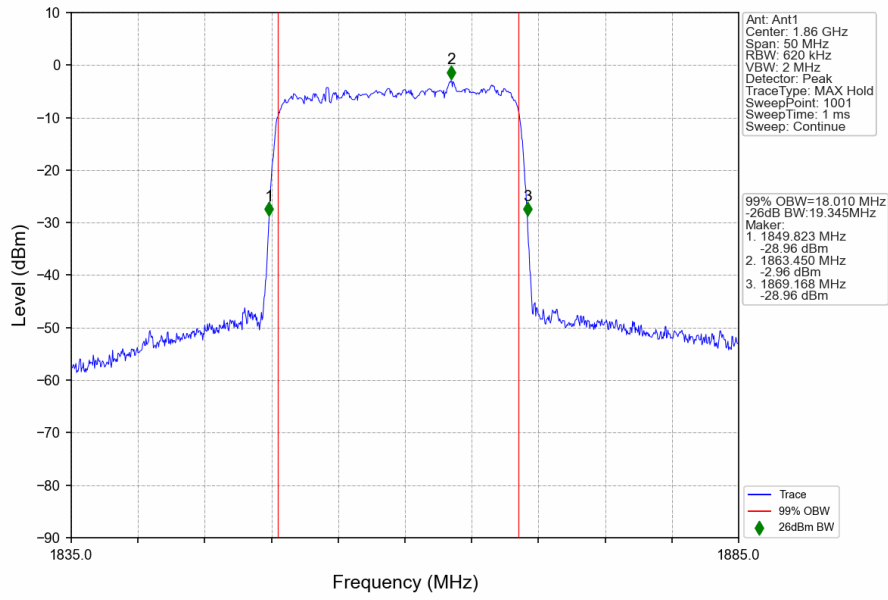
n2_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 64 QAM_1880MHz_Outer_Full



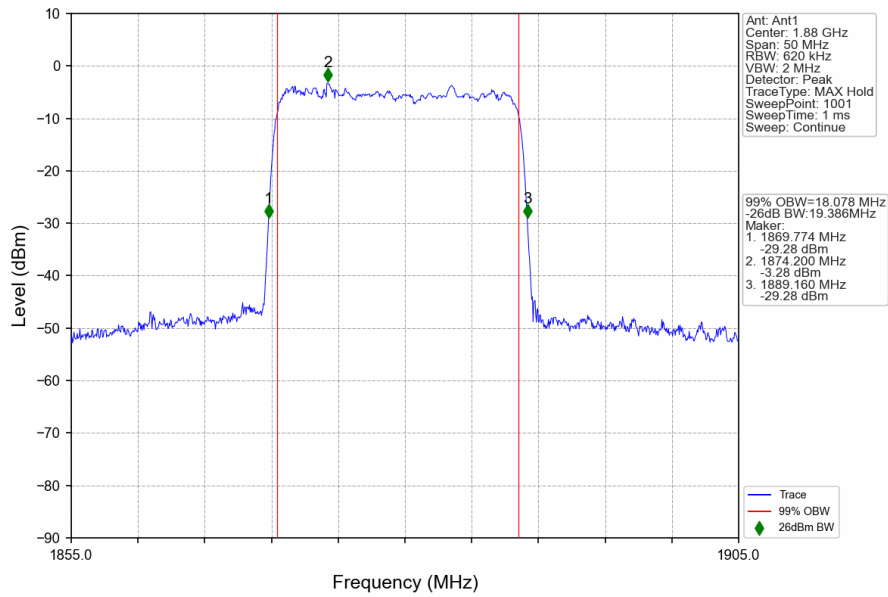
n2_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 64 QAM_1900MHz_Outer_Full



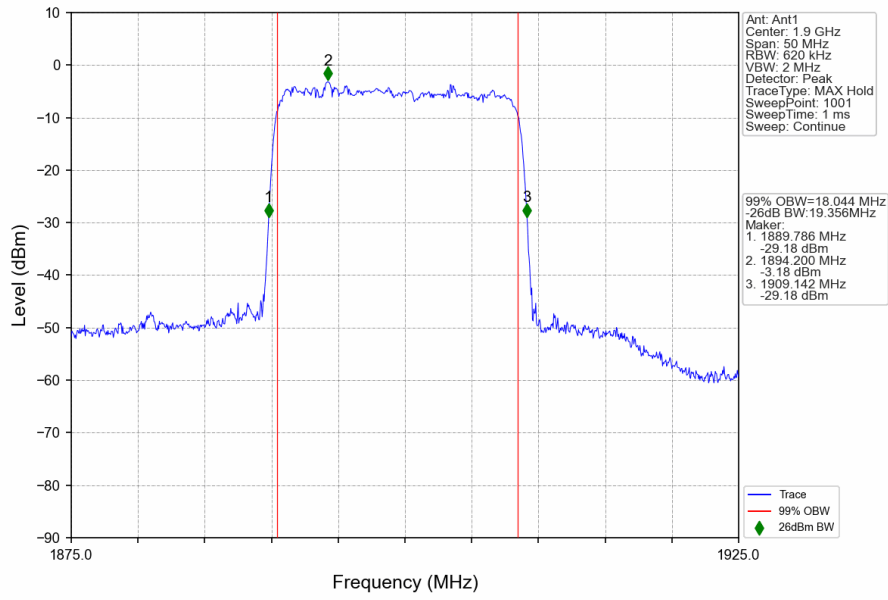
n2_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 256 QAM_1860MHz_Outer_Full



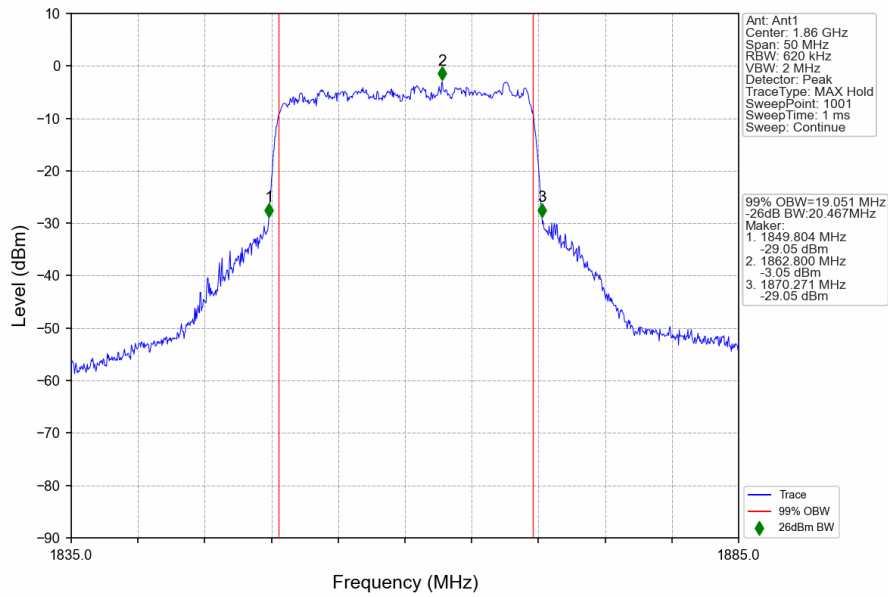
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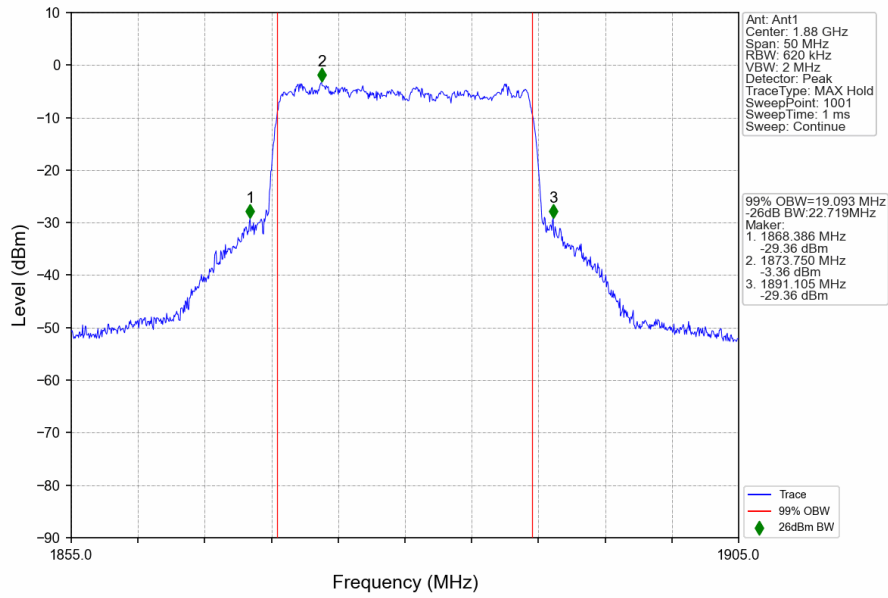
n2_15kHz_SISO_NTNV_20MHz_DFT-s-OFDM 256 QAM_1900MHz_Outer_Full



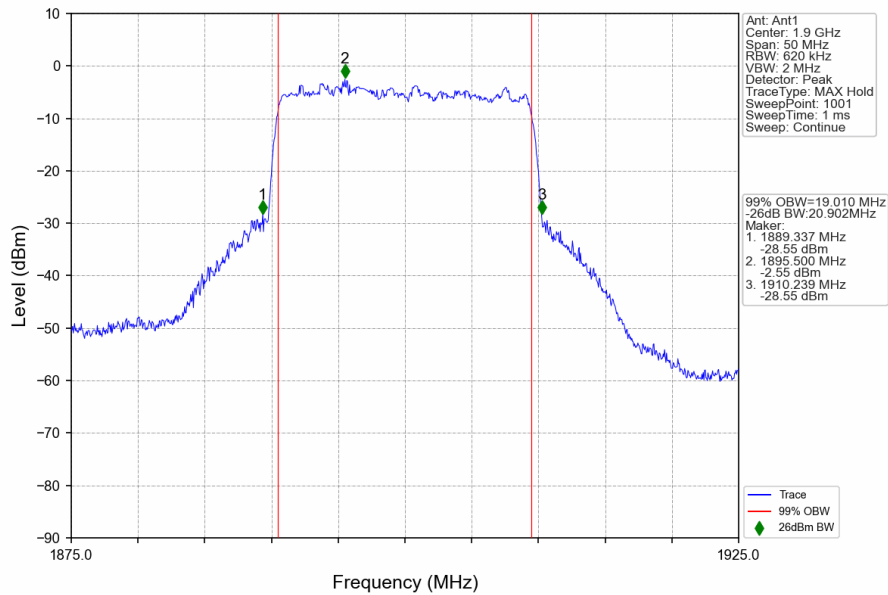
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_1860MHz_Outer_Full



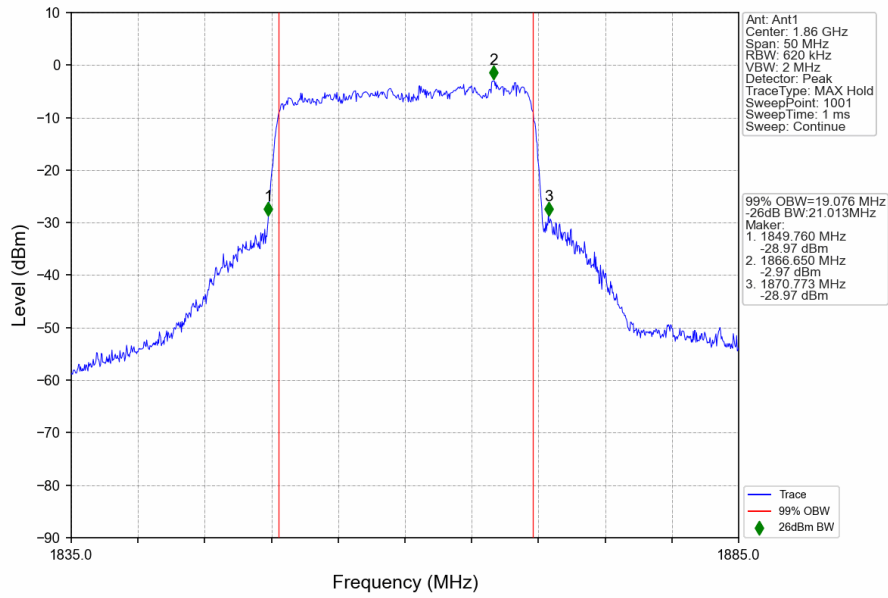
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_1880MHz_Outer_Full



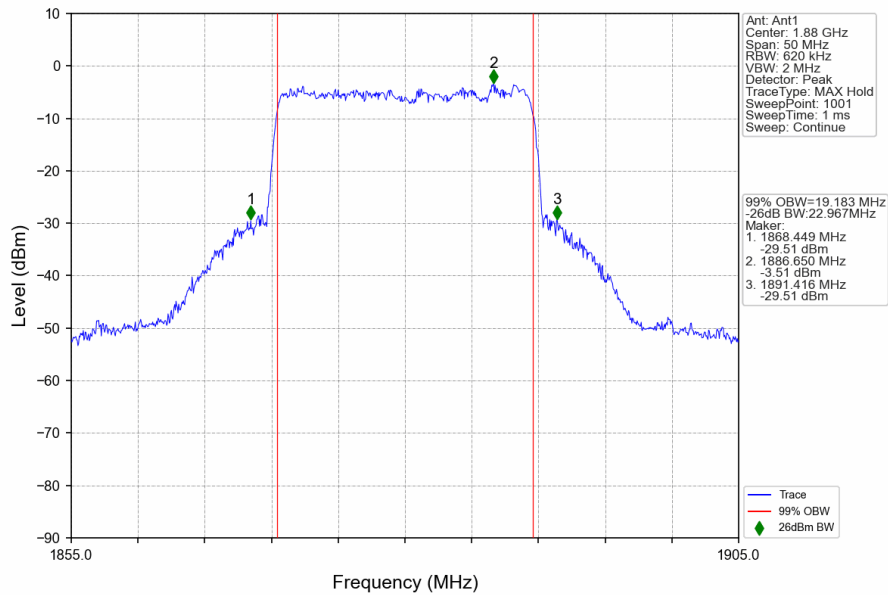
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM QPSK_1900MHz_Outer_Full



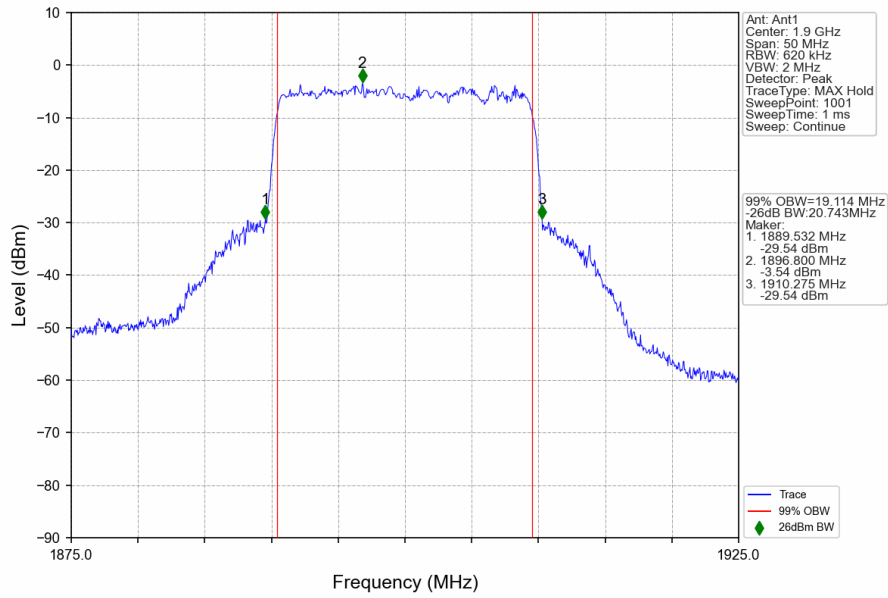
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM 16 QAM_1860MHz_Outer_Full



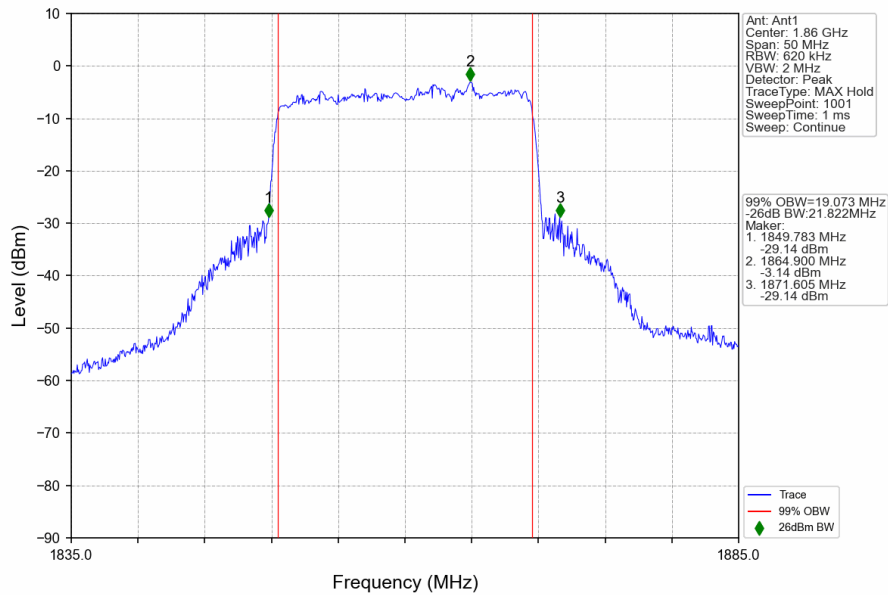
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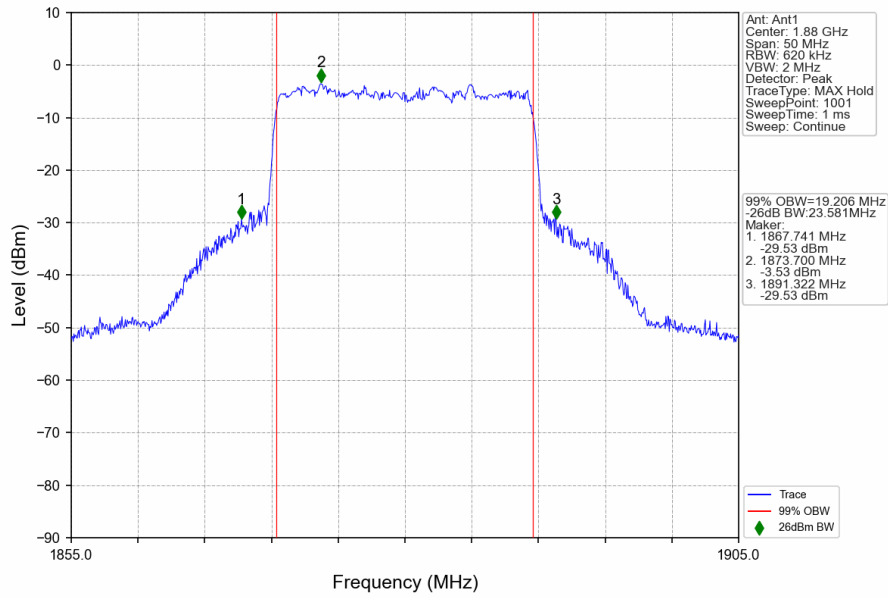
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM 16 QAM_1900MHz_Outer_Full



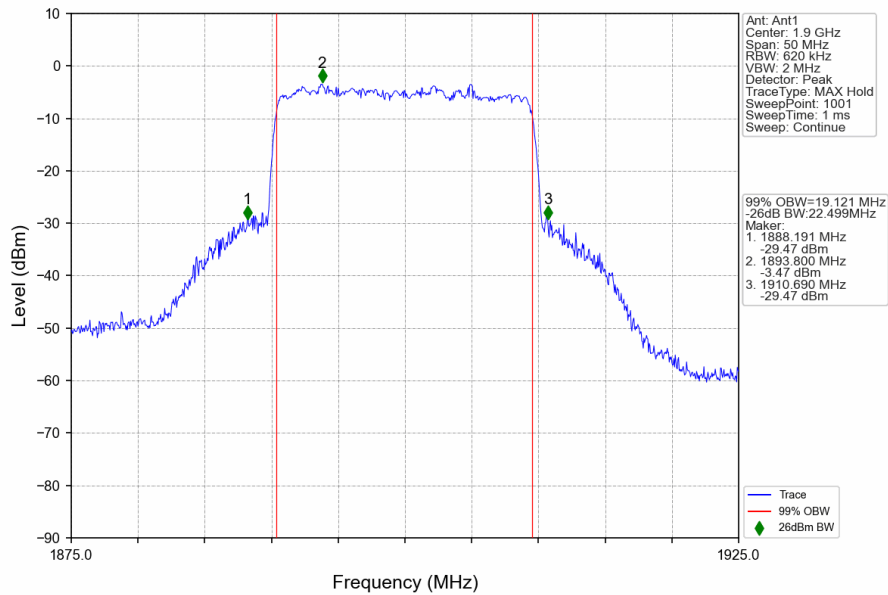
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM_1860MHz_Outer_Full



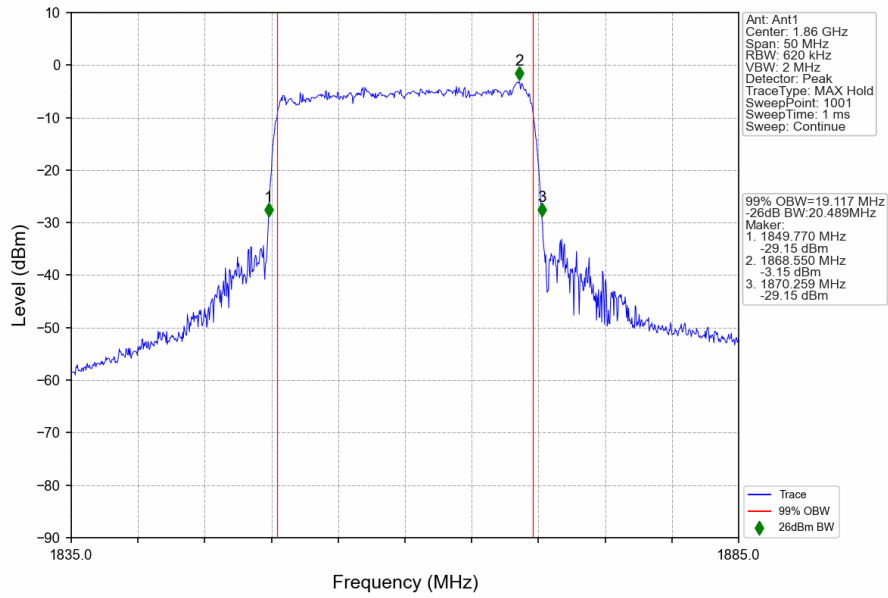
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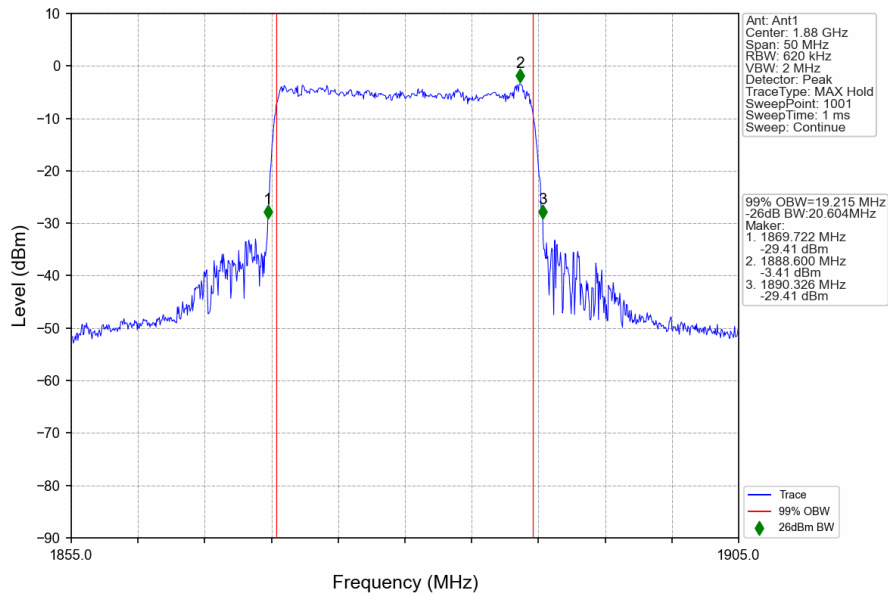
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM 64 QAM_1900MHz_Outer_Full



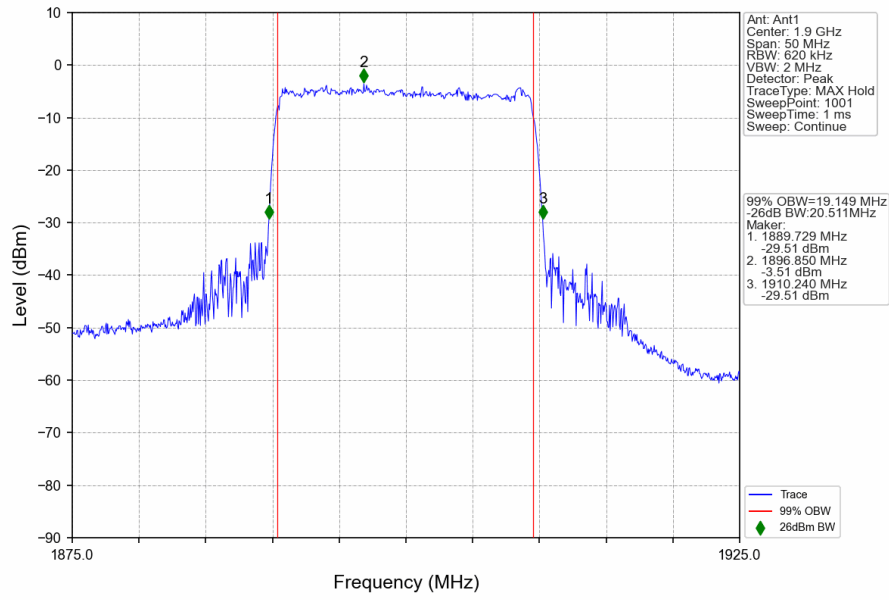
n2_15kHz_SISO_NTNV_20MHz_CP-OFDM 256 QAM_1860MHz_Outer_Full



n2_15kHz_SISO_NTNV_20MHz_CP-OFDM 256 QAM_1880MHz_Outer_Full



n2_15kHz_SISO_NTNV_20MHz_CP-OFDM_256 QAM_1900MHz_Outer_Full



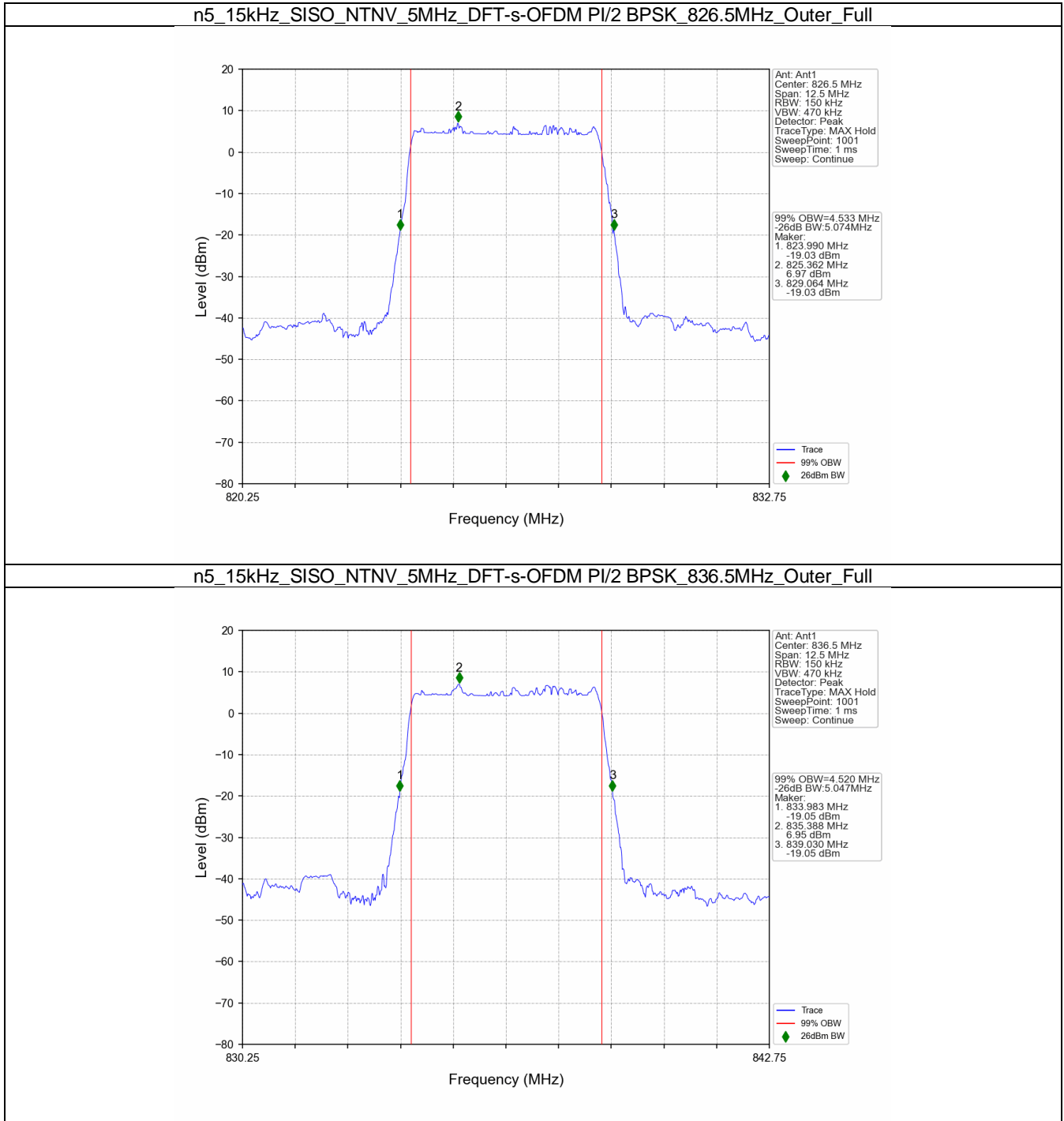
2. 99% & 26dB Bandwidth

2.1 15k_SISO_5MHz_NTNV

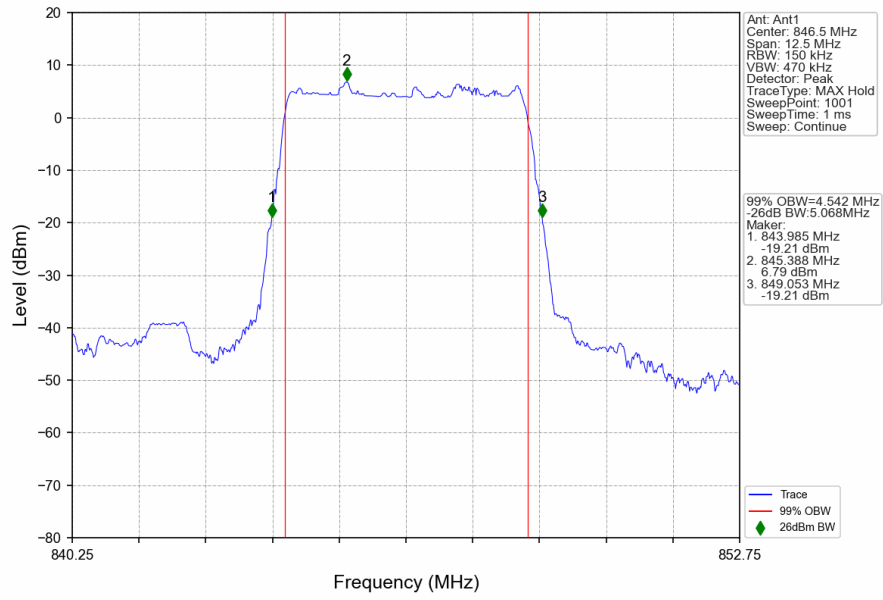
2.1.1 Test Result

5G NR n5 SCS=15kHz SISO 5MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	826.5	Outer_Full	4.53	5.07	/	Pass
	836.5	Outer_Full	4.52	5.05	/	Pass
	846.5	Outer_Full	4.54	5.07	/	Pass
DFT-s-OFDM QPSK	826.5	Outer_Full	4.52	5.01	/	Pass
	836.5	Outer_Full	4.52	5.05	/	Pass
	846.5	Outer_Full	4.53	5.02	/	Pass
DFT-s-OFDM 16 QAM	826.5	Outer_Full	4.53	5.02	/	Pass
	836.5	Outer_Full	4.55	5.05	/	Pass
	846.5	Outer_Full	4.57	5.06	/	Pass
DFT-s-OFDM 64 QAM	826.5	Outer_Full	4.53	5.08	/	Pass
	836.5	Outer_Full	4.53	5.05	/	Pass
	846.5	Outer_Full	4.53	5.02	/	Pass
DFT-s-OFDM 256 QAM	826.5	Outer_Full	4.51	5.05	/	Pass
	836.5	Outer_Full	4.53	5.06	/	Pass
	846.5	Outer_Full	4.52	5.06	/	Pass
CP-OFDM QPSK	826.5	Outer_Full	4.54	5.10	/	Pass
	836.5	Outer_Full	4.53	5.11	/	Pass
	846.5	Outer_Full	4.52	5.06	/	Pass
CP-OFDM 16 QAM	826.5	Outer_Full	4.54	5.05	/	Pass
	836.5	Outer_Full	4.57	5.09	/	Pass
	846.5	Outer_Full	4.55	5.11	/	Pass
CP-OFDM 64 QAM	826.5	Outer_Full	4.53	5.11	/	Pass
	836.5	Outer_Full	4.54	5.14	/	Pass
	846.5	Outer_Full	4.53	5.07	/	Pass
CP-OFDM 256 QAM	826.5	Outer_Full	4.54	5.12	/	Pass
	836.5	Outer_Full	4.55	5.10	/	Pass
	846.5	Outer_Full	4.54	5.11	/	Pass

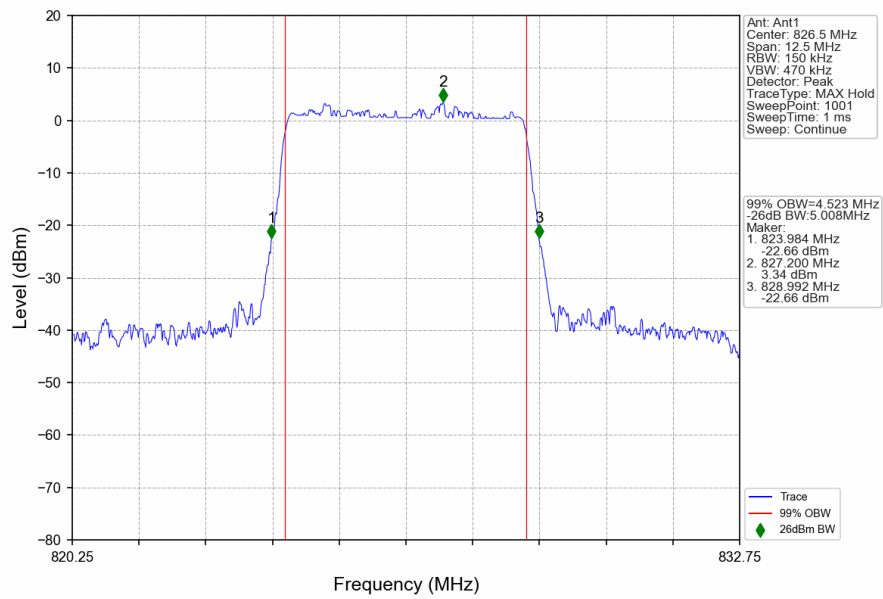
2.1.2 Test Graph



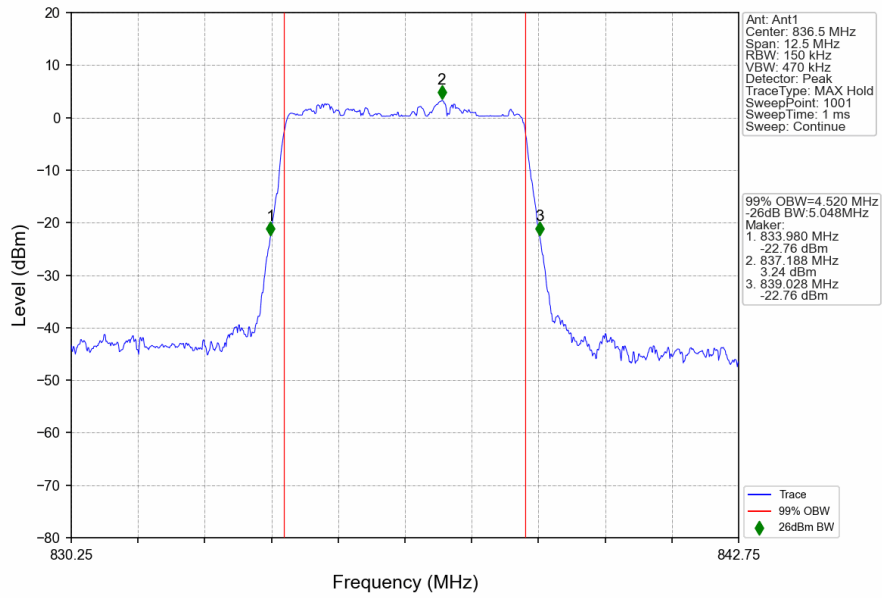
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_846.5MHz_Outer_Full



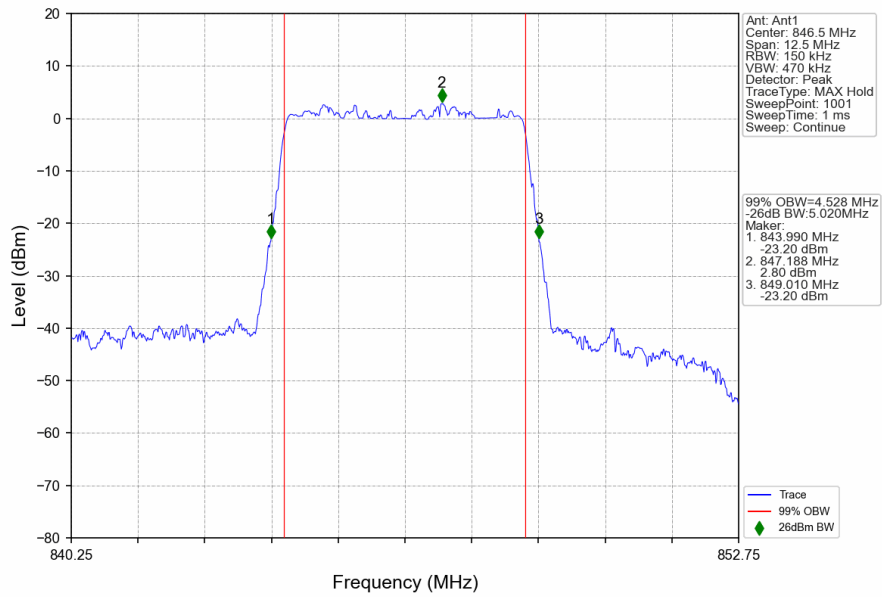
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM QPSK_826.5MHz_Outer_Full



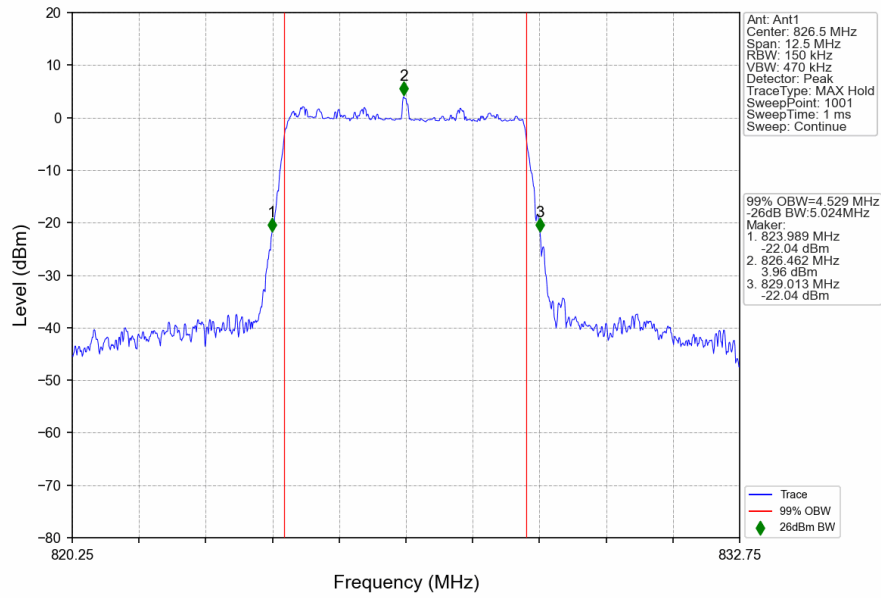
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM QPSK_836.5MHz_Outer_Full



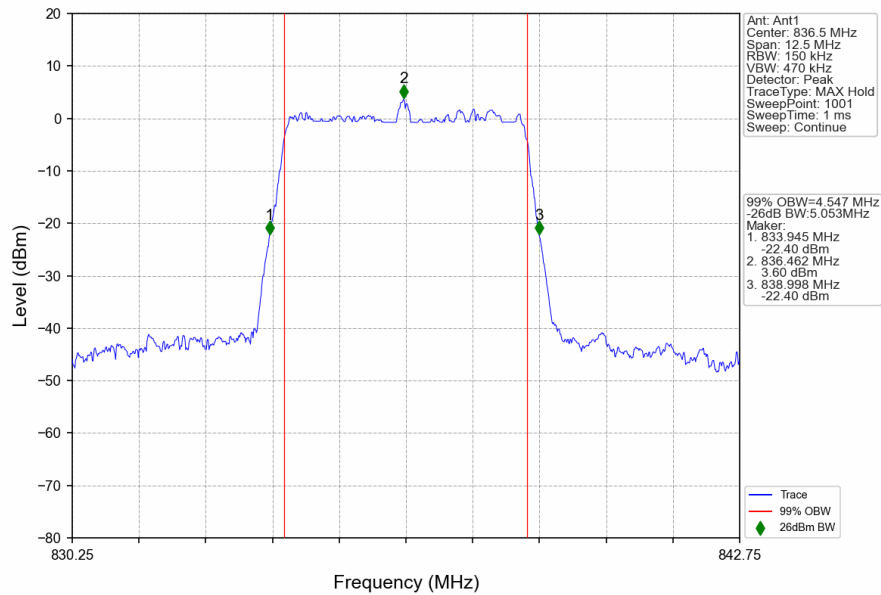
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM QPSK_846.5MHz_Outer_Full



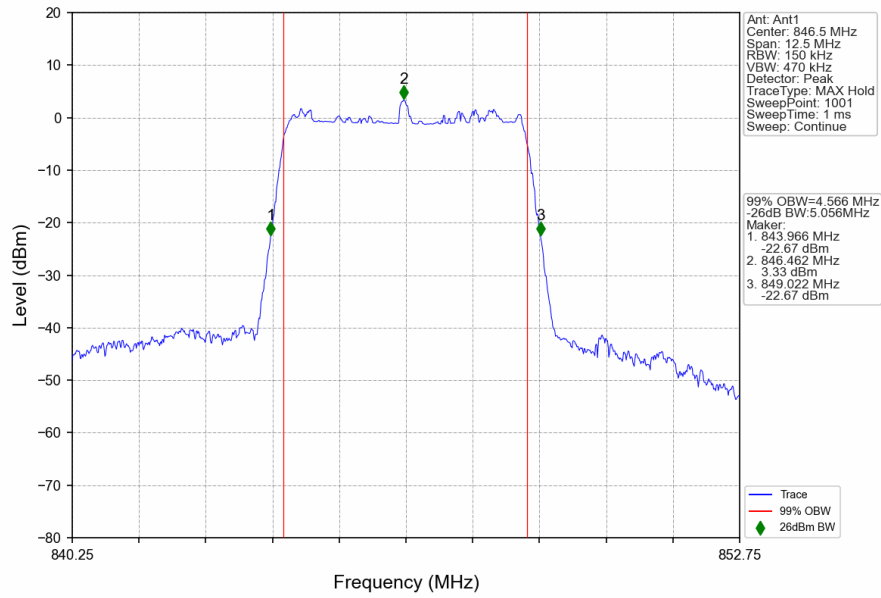
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 16 QAM_826.5MHz_Outer_Full



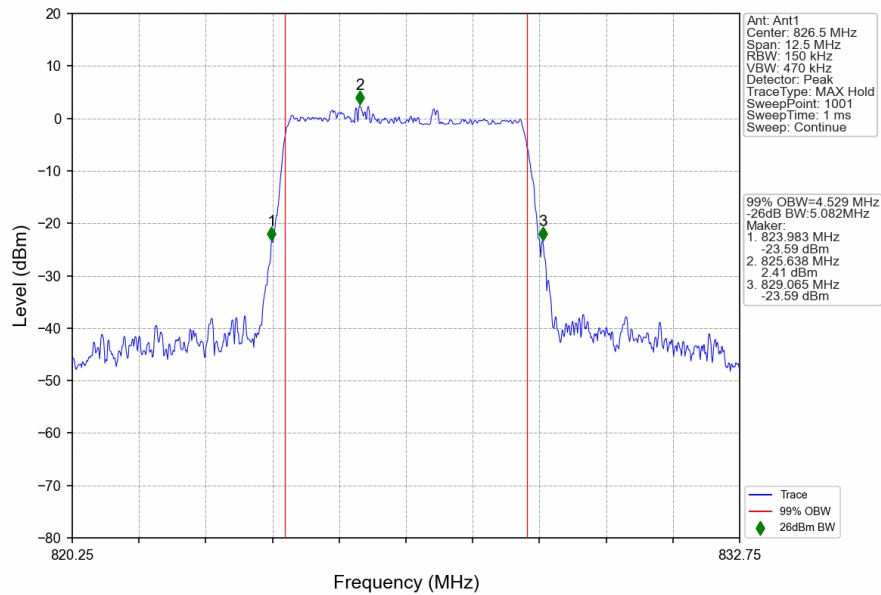
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 16 QAM_836.5MHz_Outer_Full



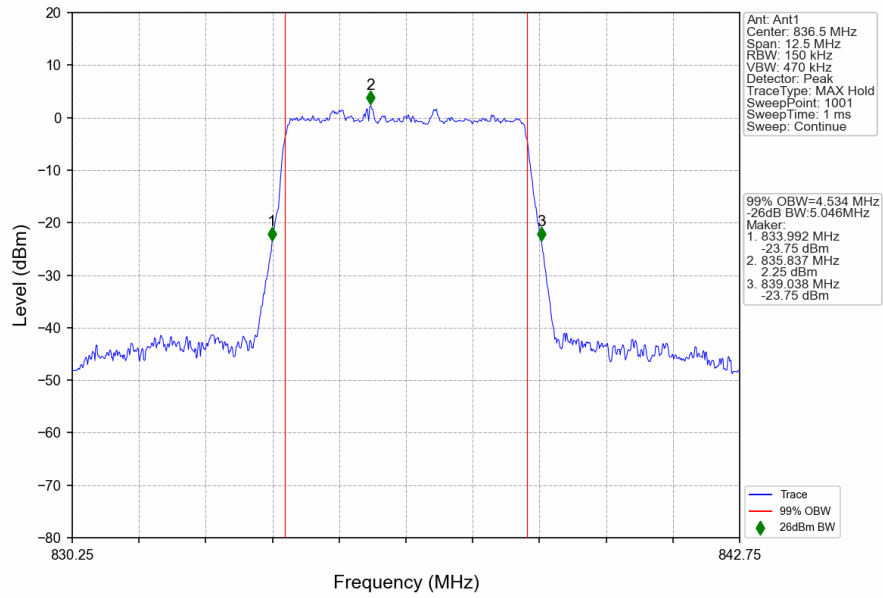
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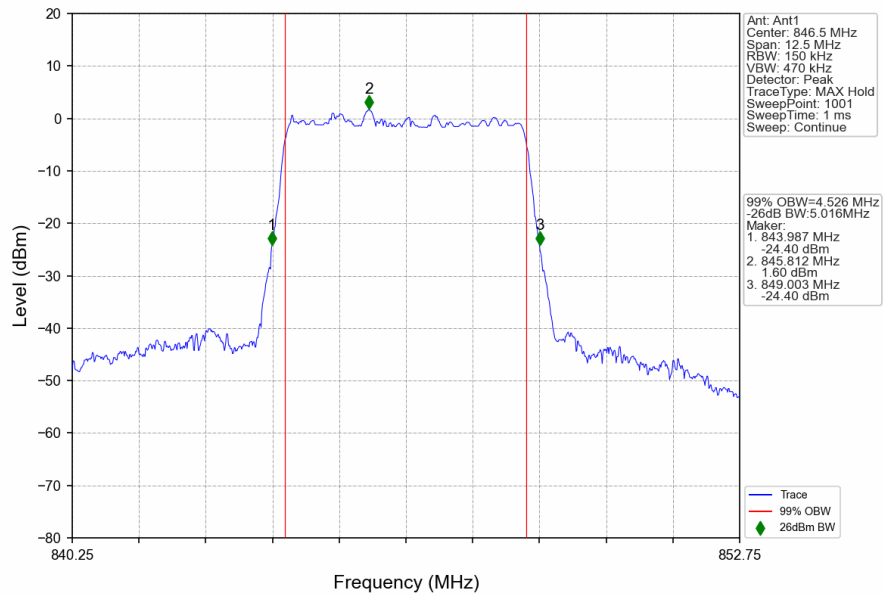
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 64 QAM_826.5MHz_Outer_Full



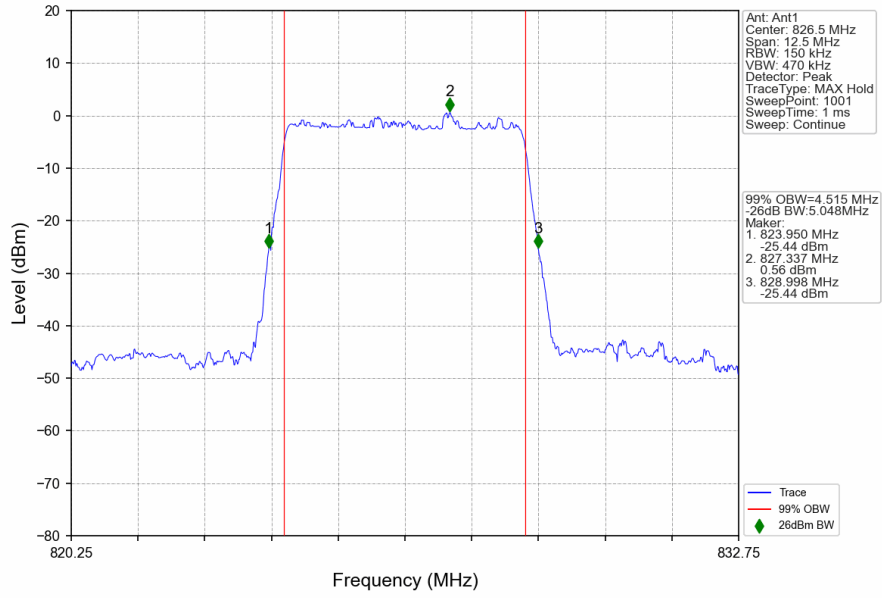
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 64 QAM_836.5MHz_Outer_Full



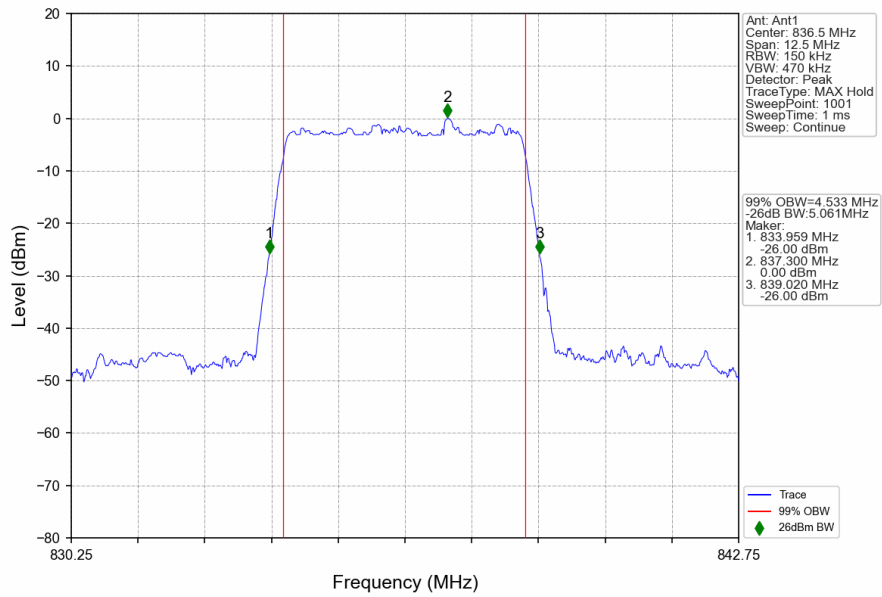
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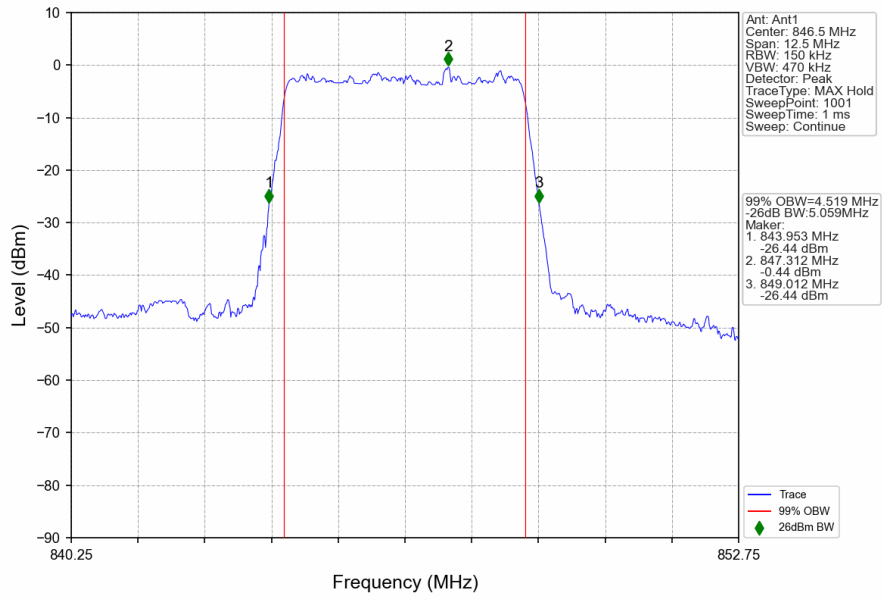
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 256 QAM_826.5MHz_Outer_Full



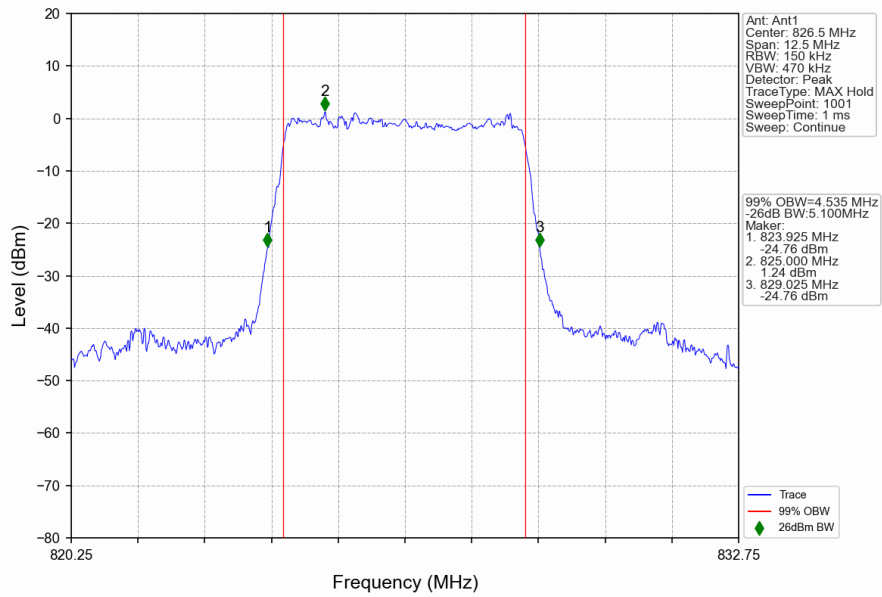
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 256 QAM_836.5MHz_Outer_Full



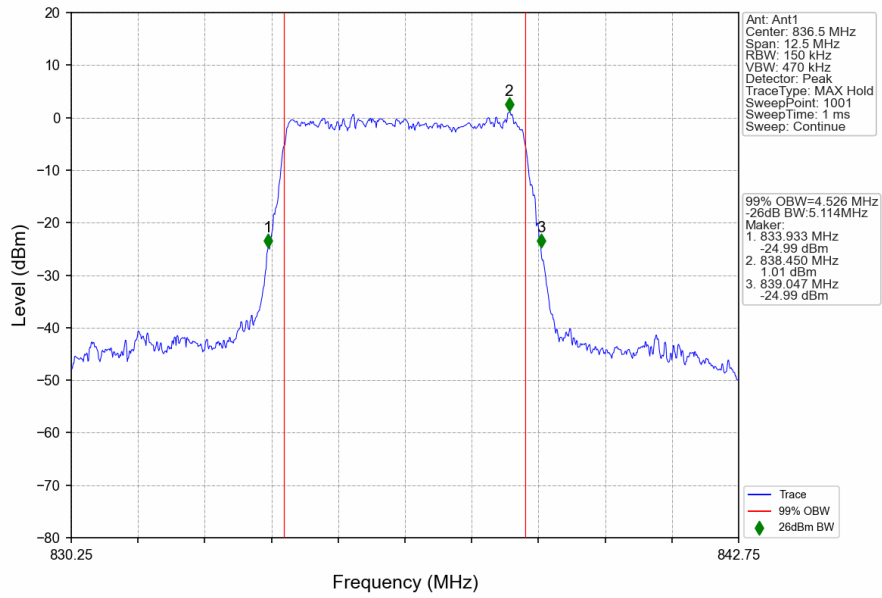
n5_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 256 QAM 846.5MHz_Outer_Full



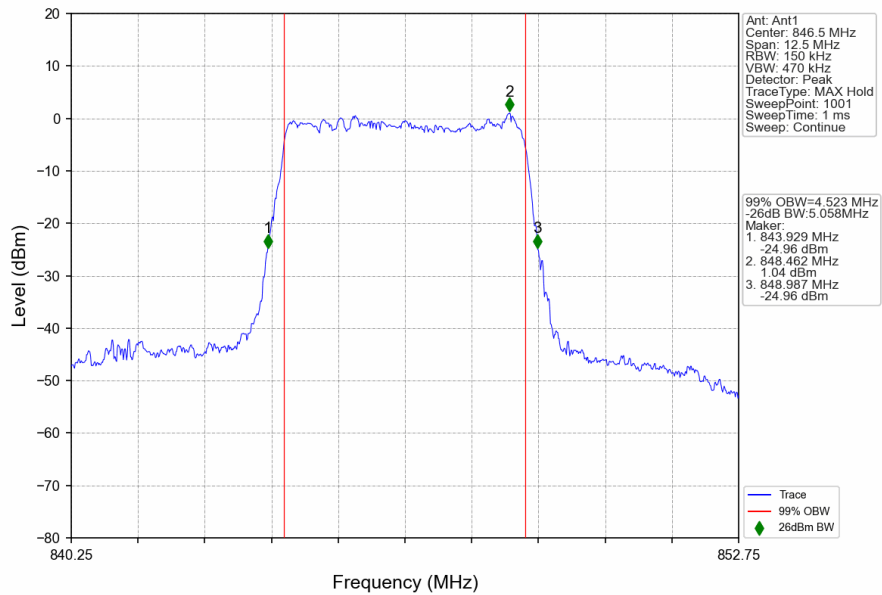
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK 826.5MHz_Outer_Full



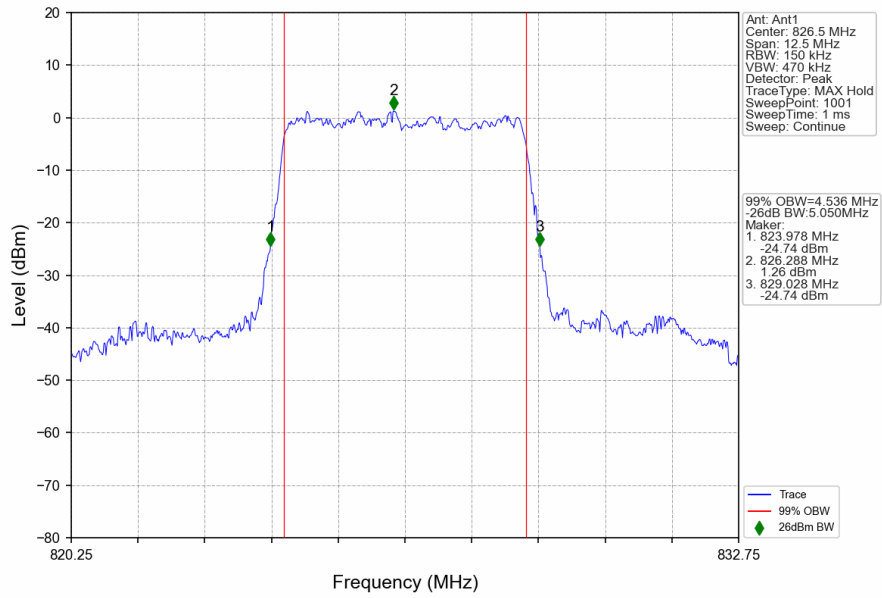
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK_836.5MHz_Outer_Full



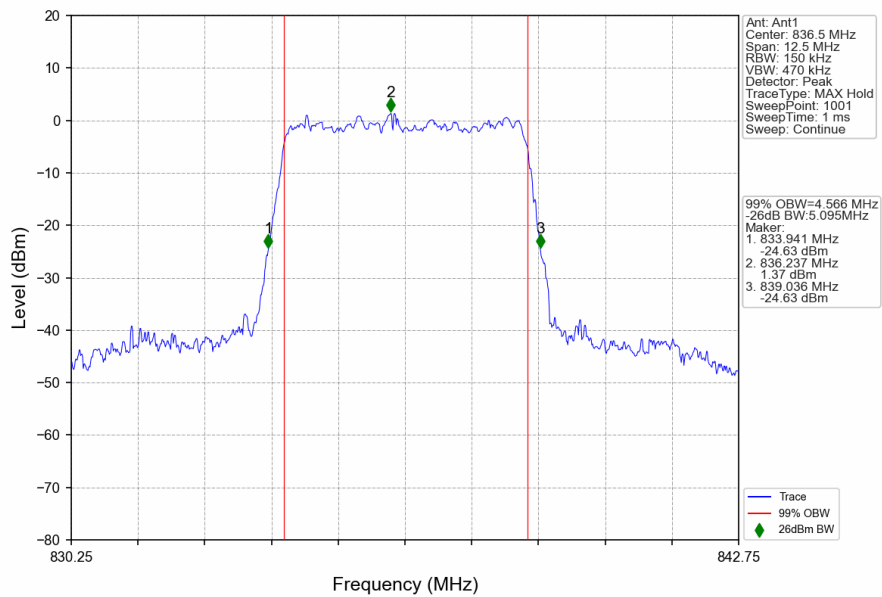
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK_846.5MHz_Outer_Full



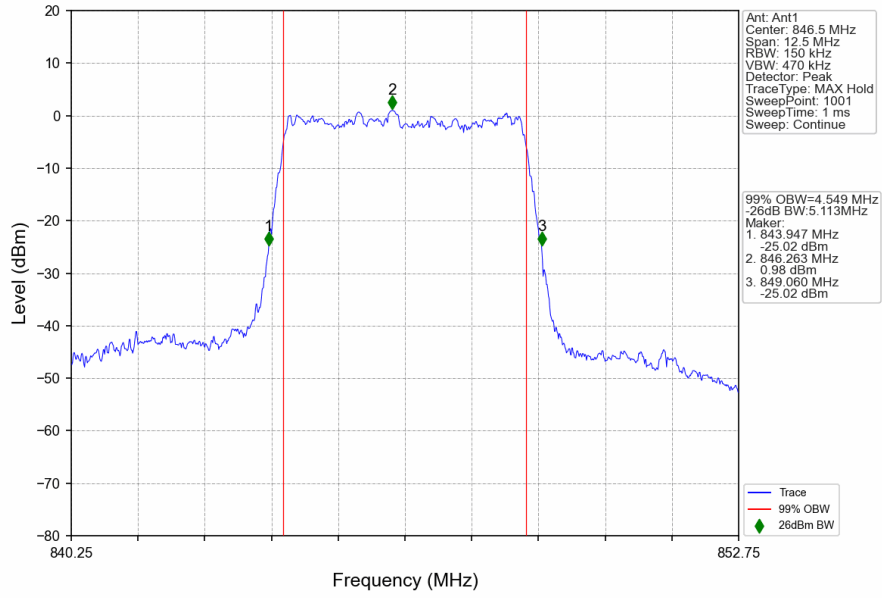
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM_826.5MHz_Outer_Full



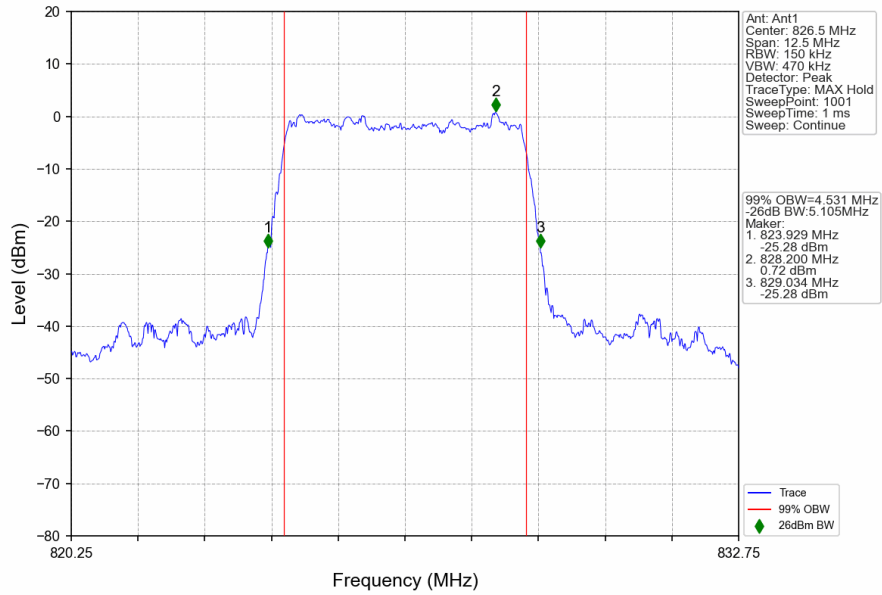
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM_836.5MHz_Outer_Full



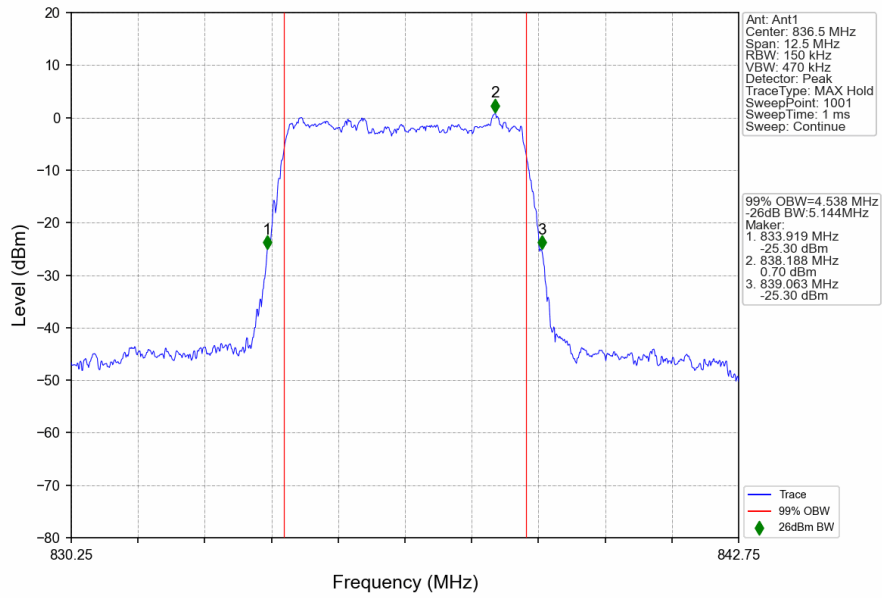
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM_846.5MHz_Outer_Full



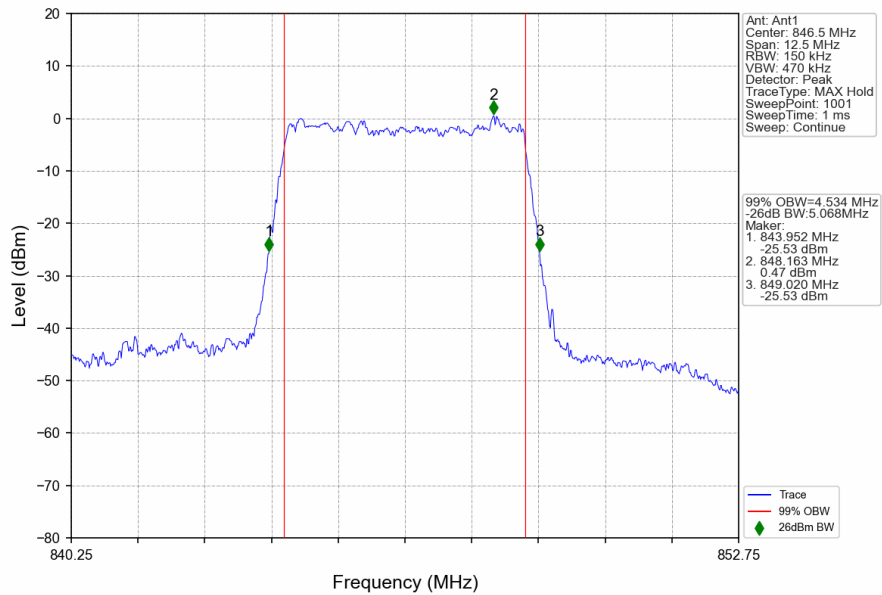
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 64 QAM_826.5MHz_Outer_Full



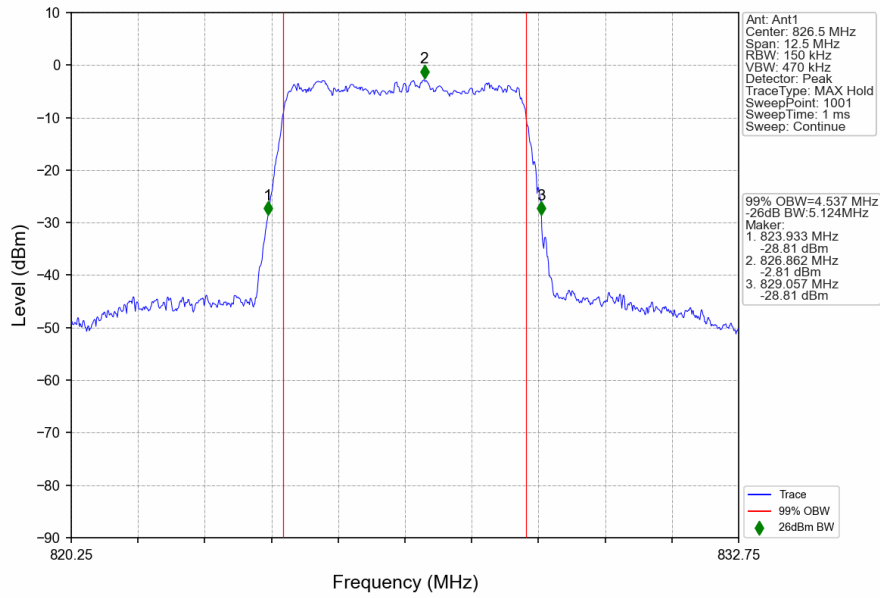
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 64 QAM_836.5MHz_Outer_Full



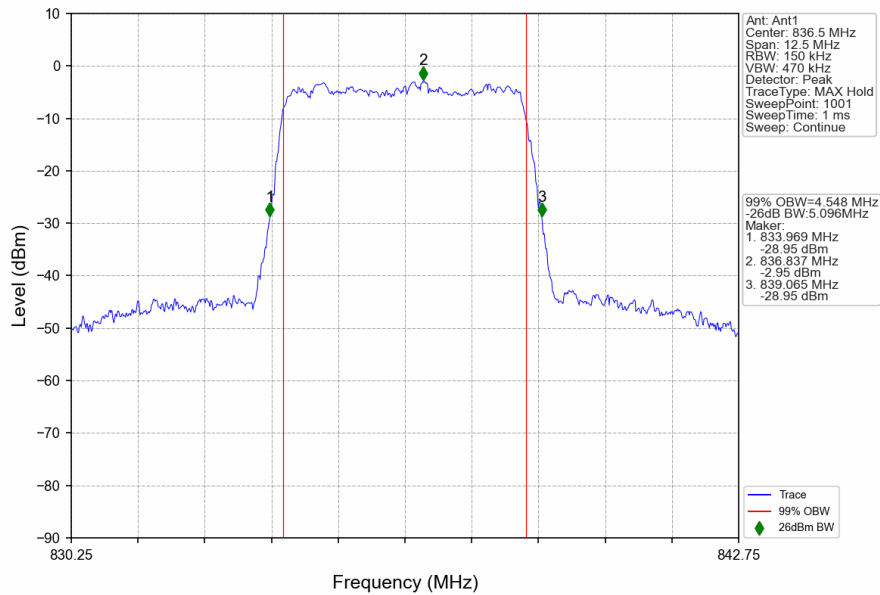
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 64 QAM_846.5MHz_Outer_Full



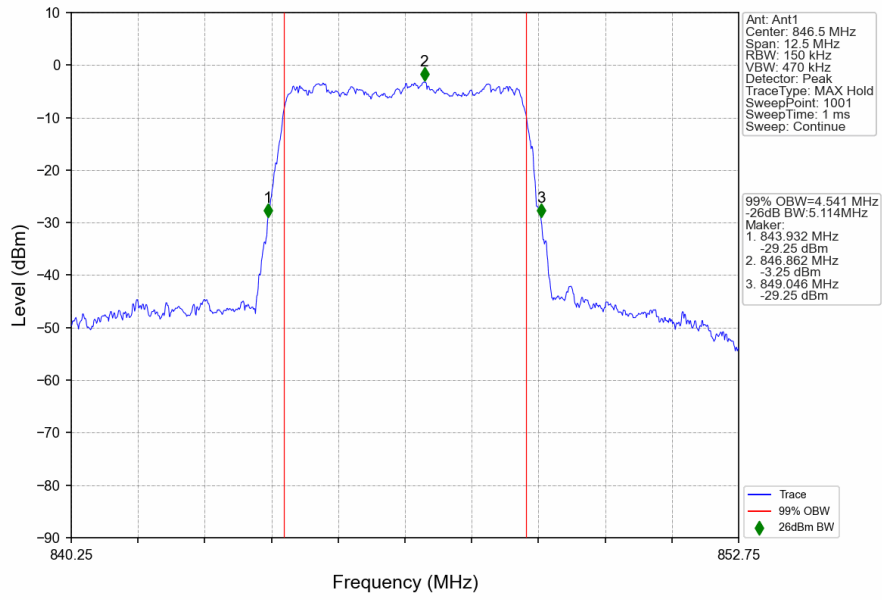
n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 256 QAM_826.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 256 QAM_836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_5MHz_CP-OFDM 256 QAM 846.5MHz_Outer_Full

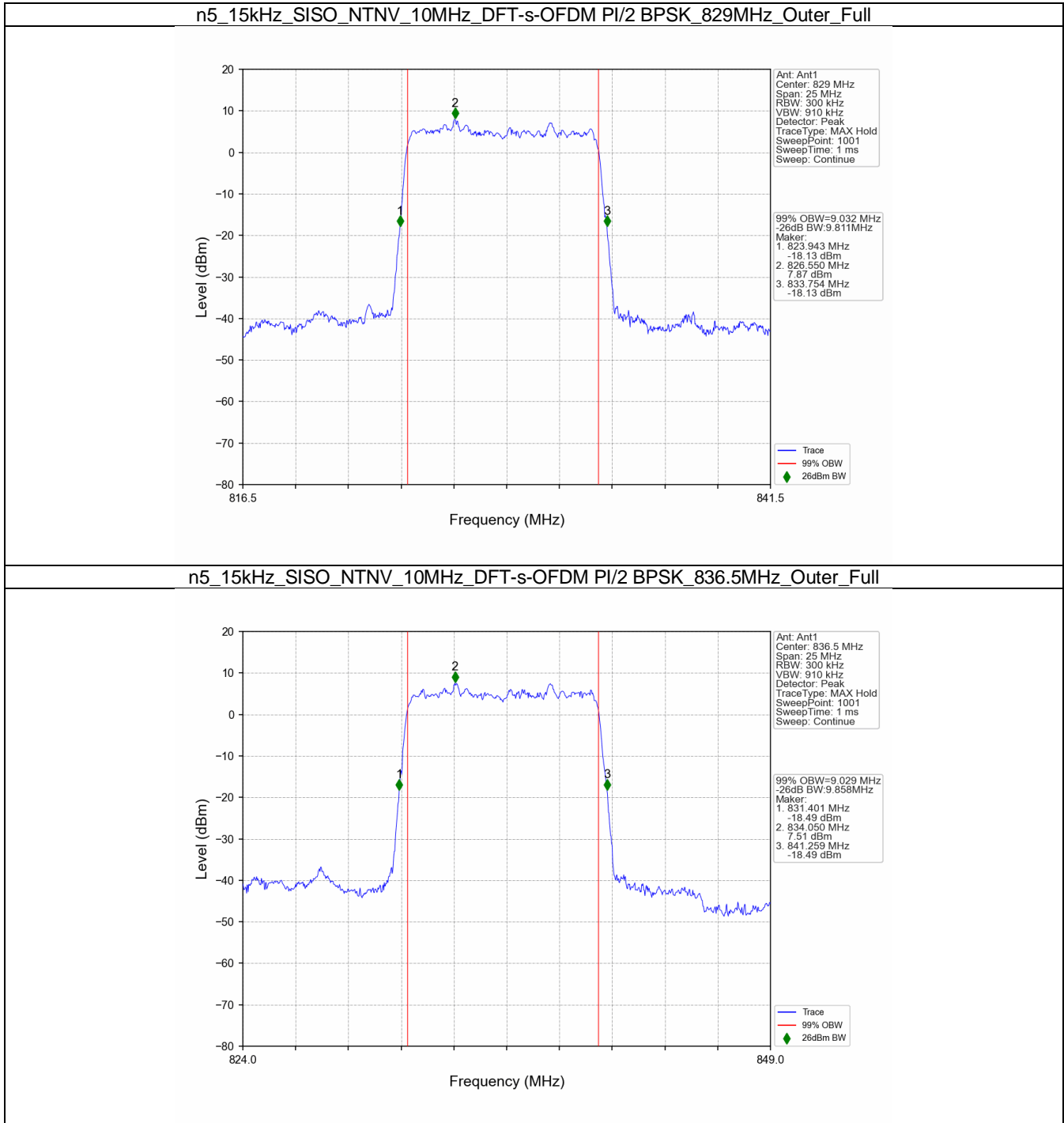


2.2 15k_SISO_10MHz_NTNV

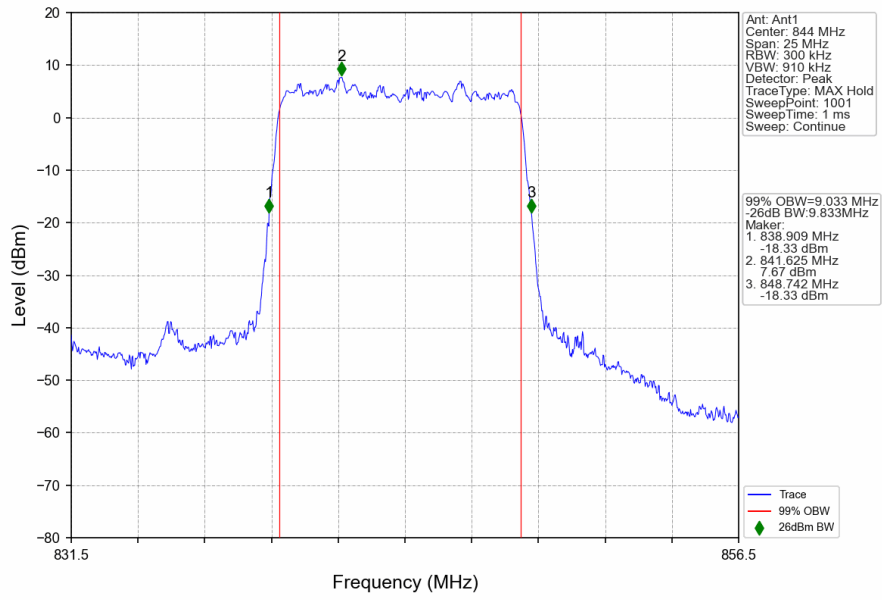
2.2.1 Test Result

5G NR n5 SCS=15kHz SISO 10MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	829	Outer_Full	9.03	9.81	/	Pass
	836.5	Outer_Full	9.03	9.86	/	Pass
	844	Outer_Full	9.03	9.83	/	Pass
DFT-s-OFDM QPSK	829	Outer_Full	9.06	9.87	/	Pass
	836.5	Outer_Full	9.06	9.90	/	Pass
	844	Outer_Full	9.06	9.85	/	Pass
DFT-s-OFDM 16 QAM	829	Outer_Full	9.04	9.85	/	Pass
	836.5	Outer_Full	9.04	9.86	/	Pass
	844	Outer_Full	9.05	9.82	/	Pass
DFT-s-OFDM 64 QAM	829	Outer_Full	9.05	9.84	/	Pass
	836.5	Outer_Full	9.02	9.85	/	Pass
	844	Outer_Full	9.04	9.87	/	Pass
DFT-s-OFDM 256 QAM	829	Outer_Full	9.05	9.92	/	Pass
	836.5	Outer_Full	9.04	9.86	/	Pass
	844	Outer_Full	9.04	9.85	/	Pass
CP-OFDM QPSK	829	Outer_Full	9.36	10.23	/	Pass
	836.5	Outer_Full	9.35	10.25	/	Pass
	844	Outer_Full	9.37	10.28	/	Pass
CP-OFDM 16 QAM	829	Outer_Full	9.38	10.25	/	Pass
	836.5	Outer_Full	9.36	10.23	/	Pass
	844	Outer_Full	9.39	10.24	/	Pass
CP-OFDM 64 QAM	829	Outer_Full	9.34	10.23	/	Pass
	836.5	Outer_Full	9.33	10.15	/	Pass
	844	Outer_Full	9.35	10.18	/	Pass
CP-OFDM 256 QAM	829	Outer_Full	9.39	10.20	/	Pass
	836.5	Outer_Full	9.38	10.27	/	Pass
	844	Outer_Full	9.42	10.21	/	Pass

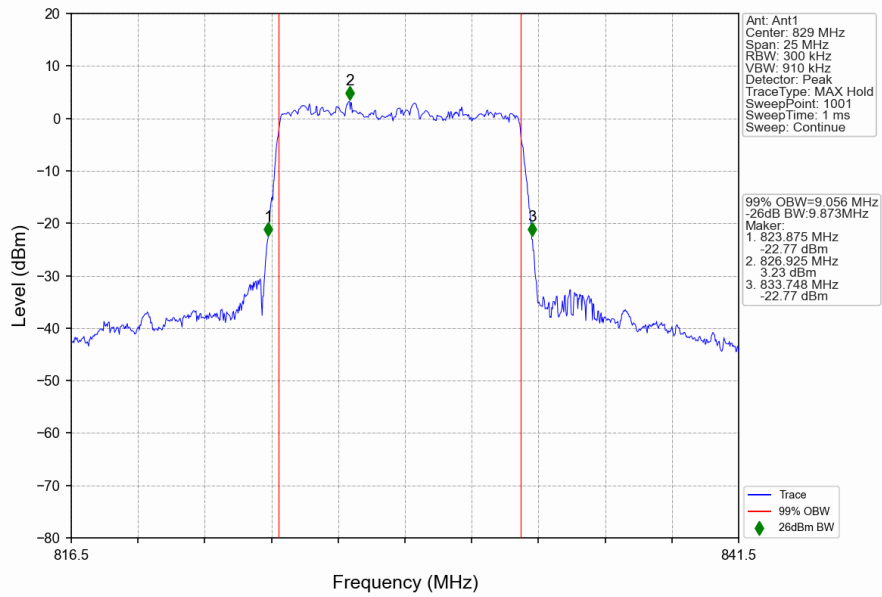
2.2.2 Test Graph



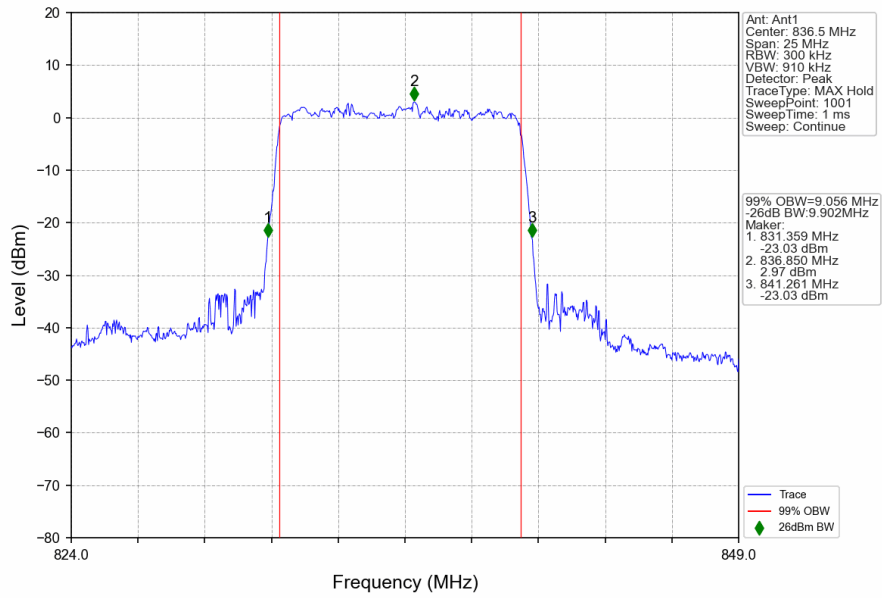
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM PI/2 BPSK_844MHz_Outer_Full



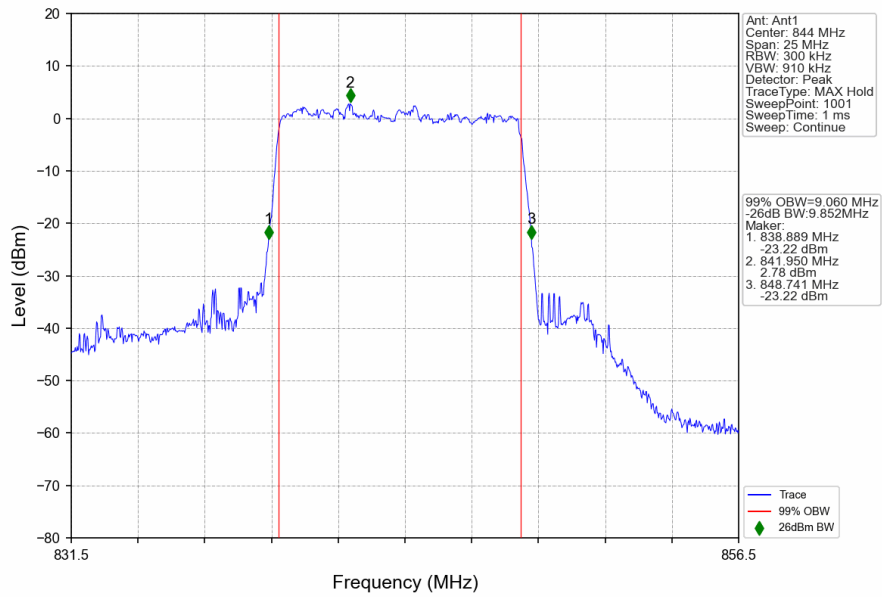
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_829MHz_Outer_Full



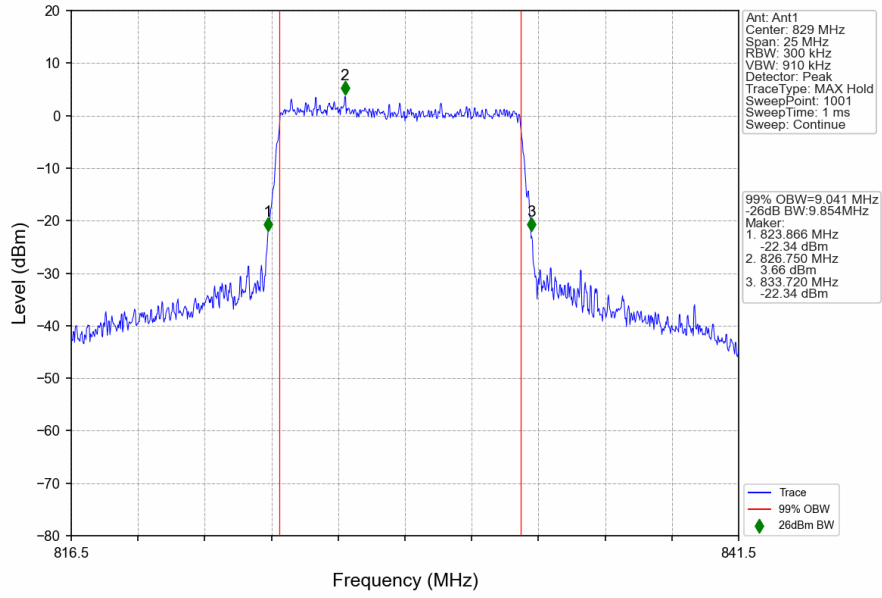
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_836.5MHz_Outer_Full



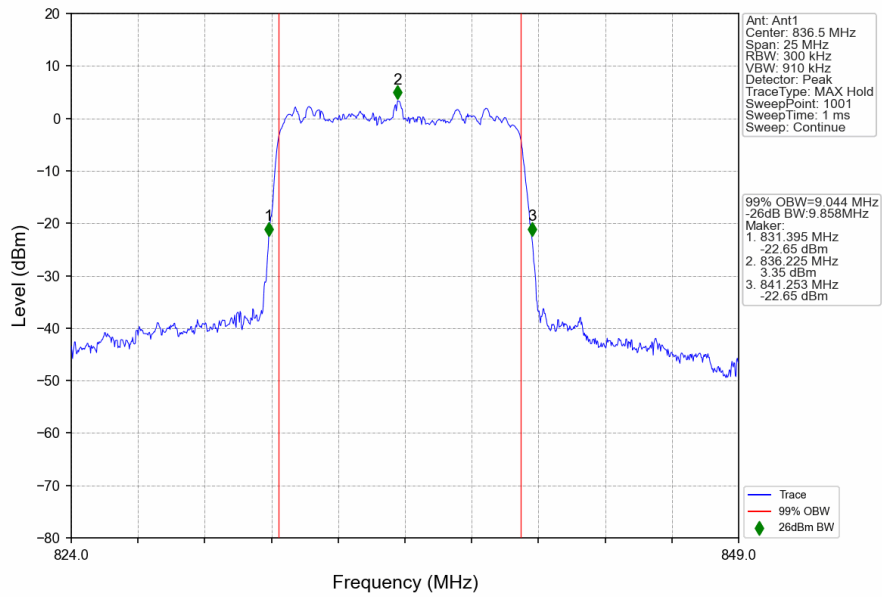
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_844MHz_Outer_Full



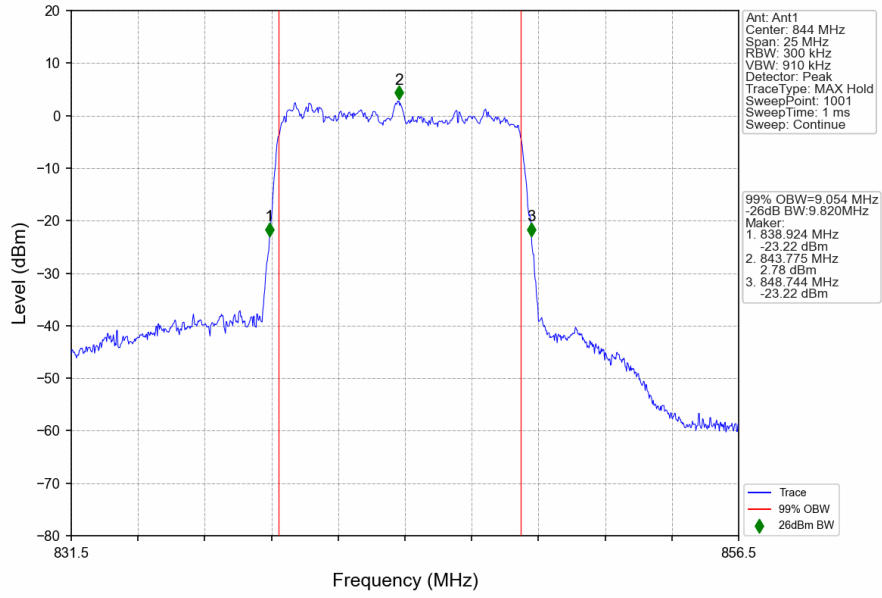
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 16 QAM_829MHz_Outer_Full



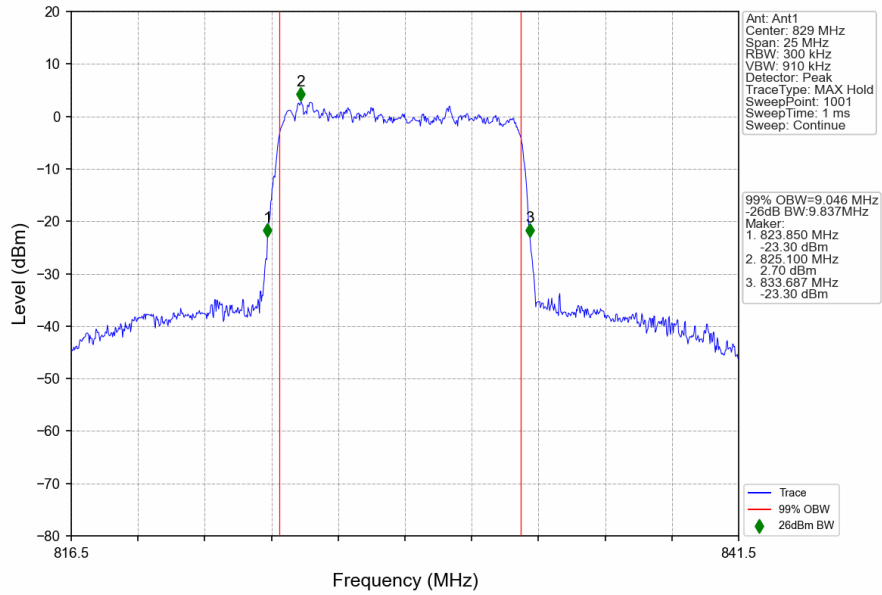
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 16 QAM_836.5MHz_Outer_Full



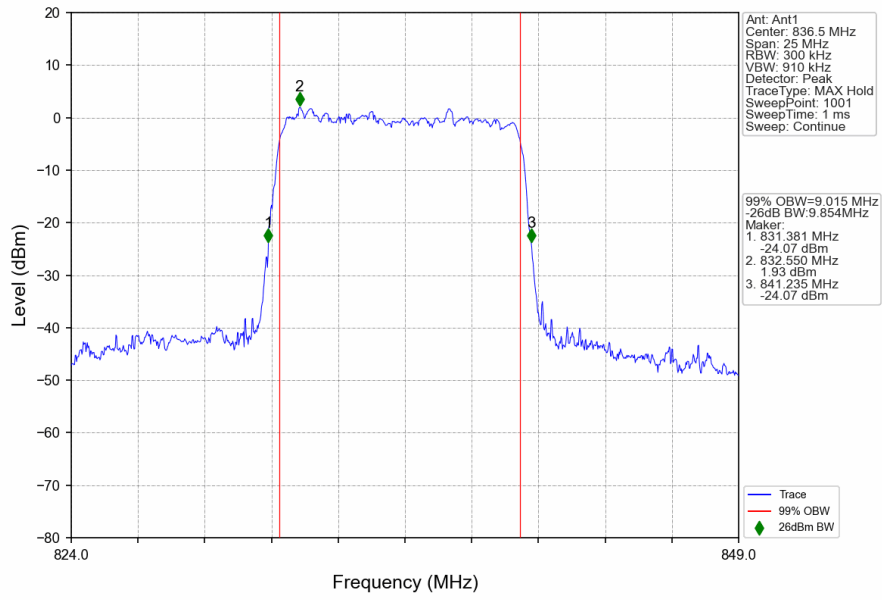
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 16 QAM_844MHz_Outer_Full



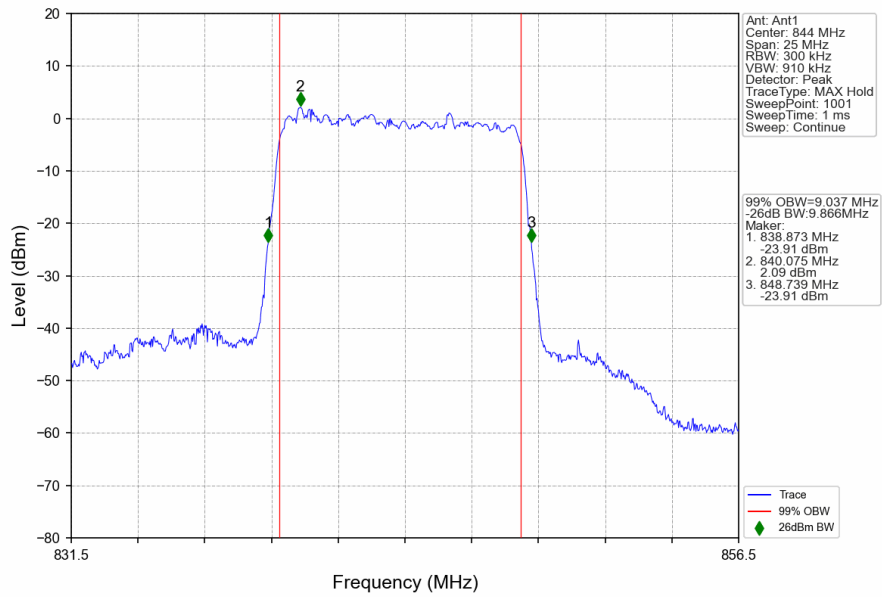
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_829MHz_Outer_Full



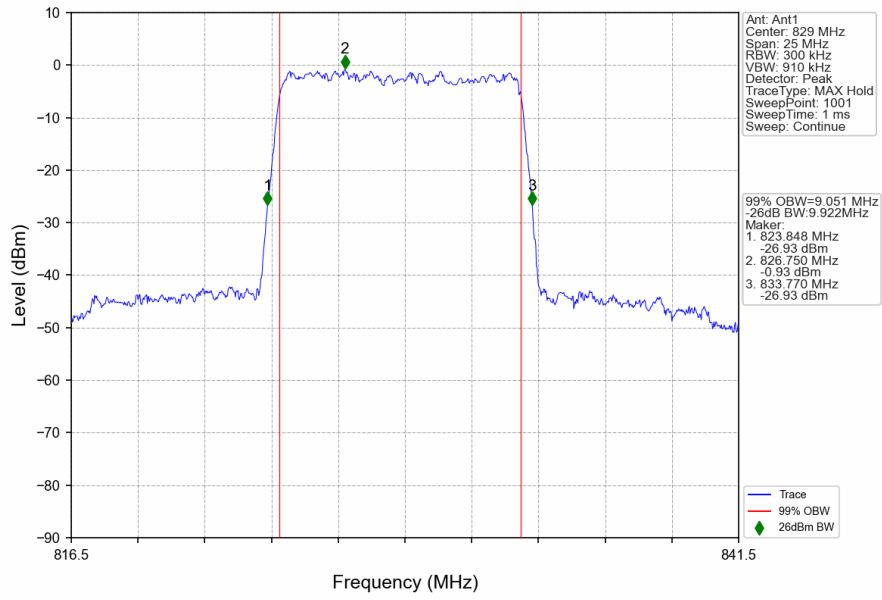
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_836.5MHz_Outer_Full



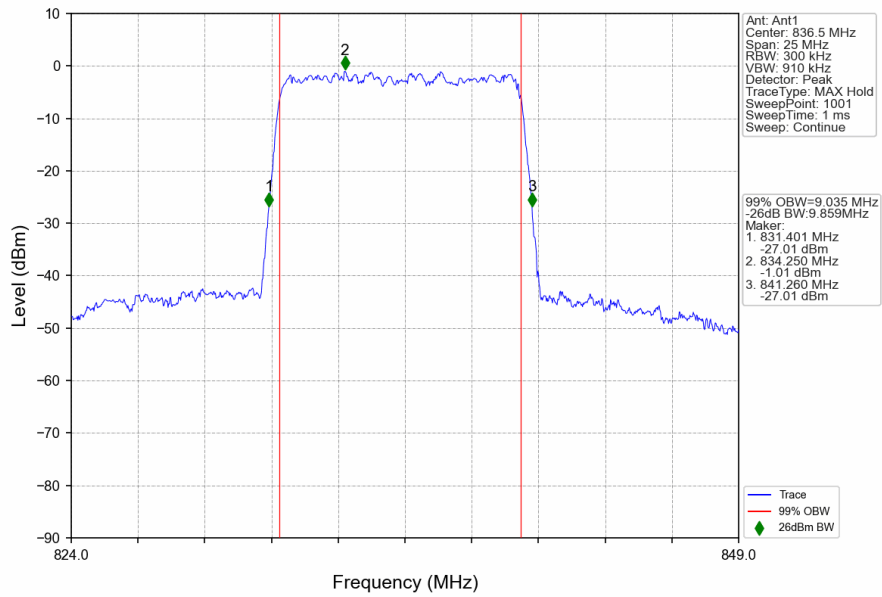
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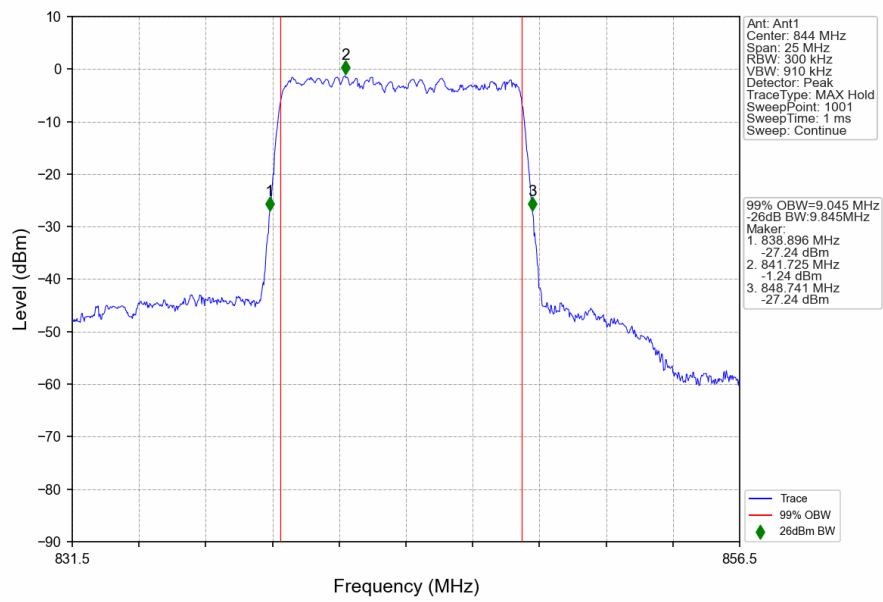
n5_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM_829MHz_Outer_Full



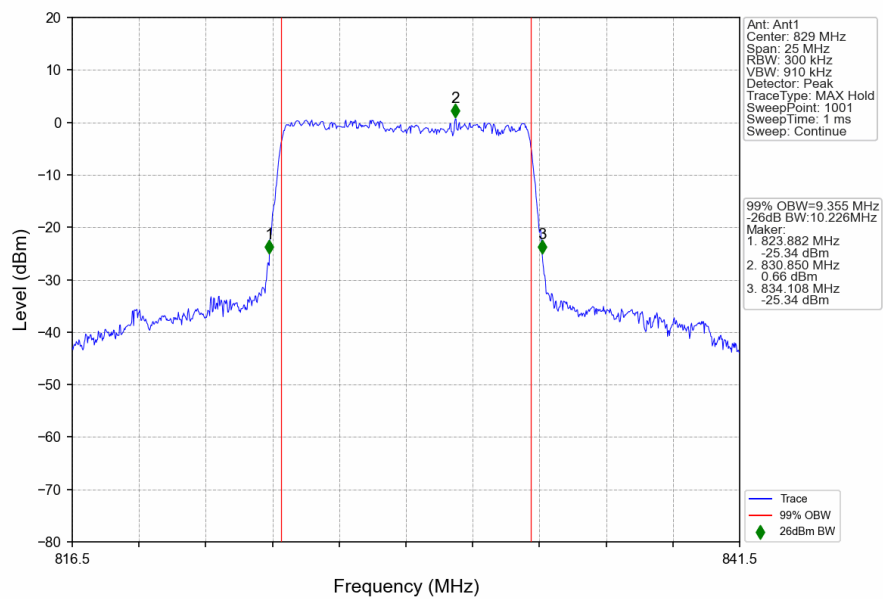
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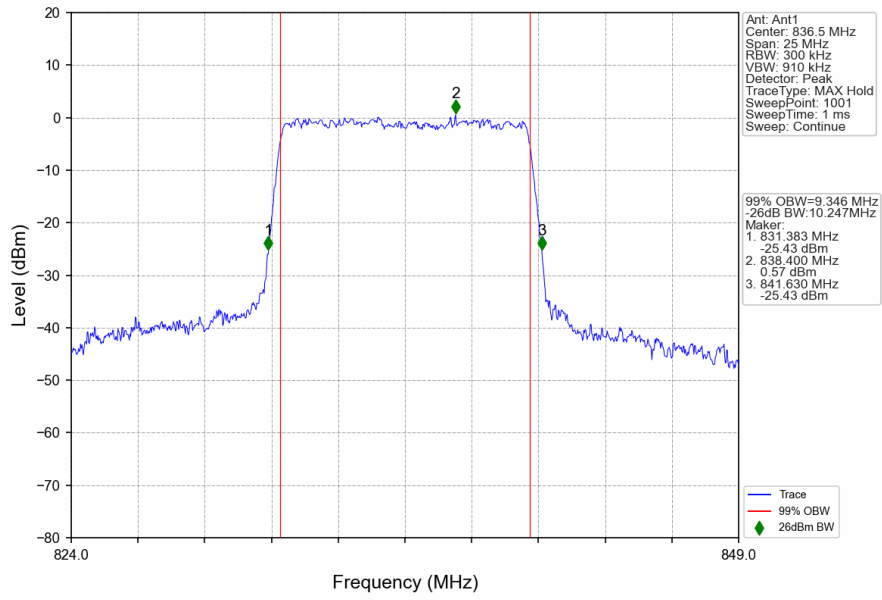
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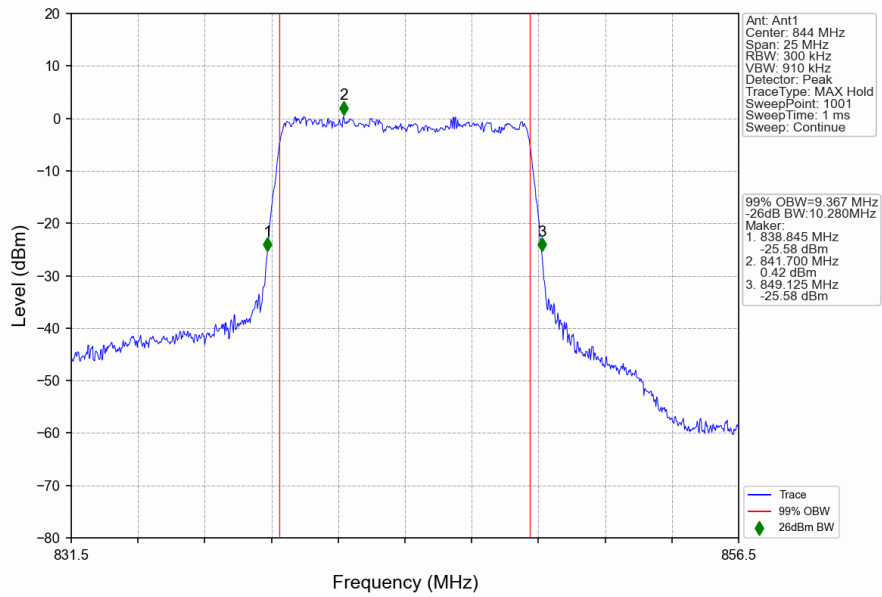
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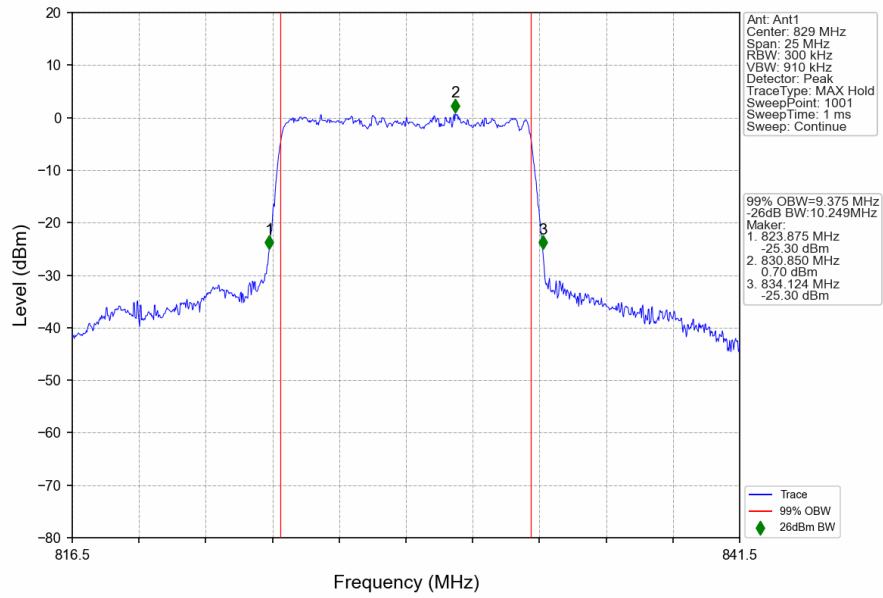
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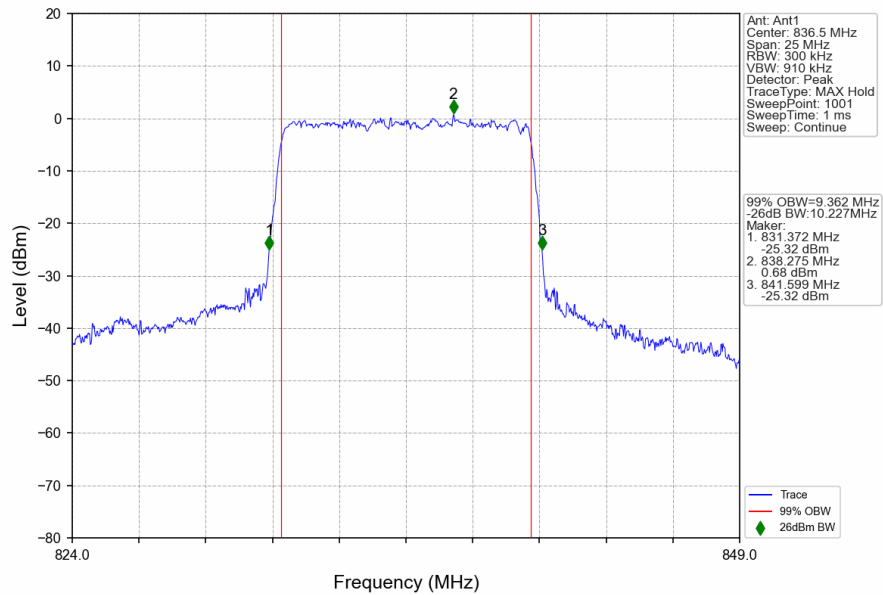
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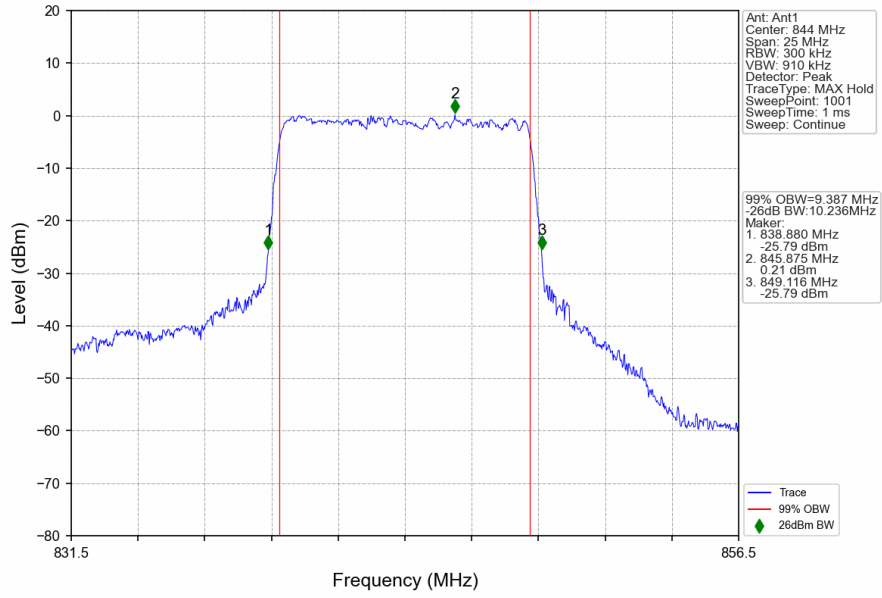
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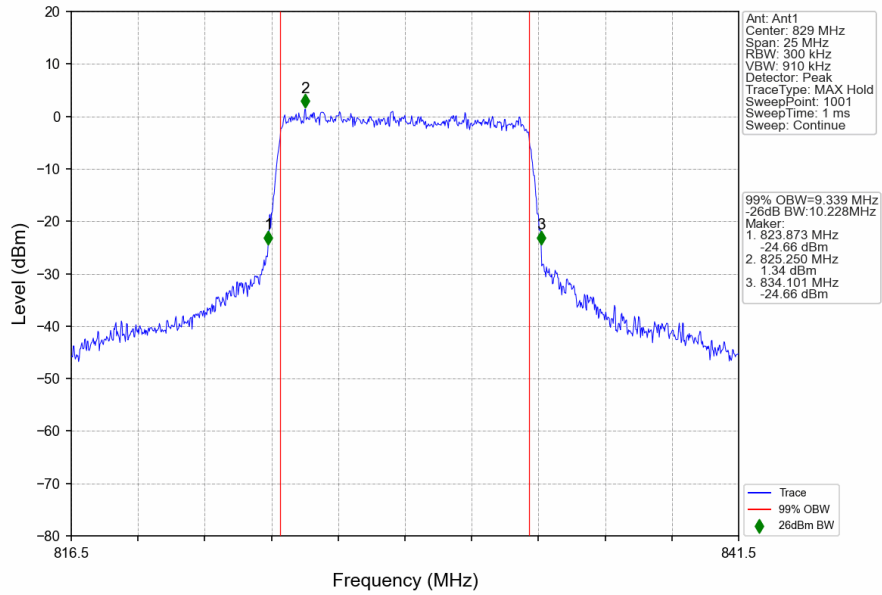
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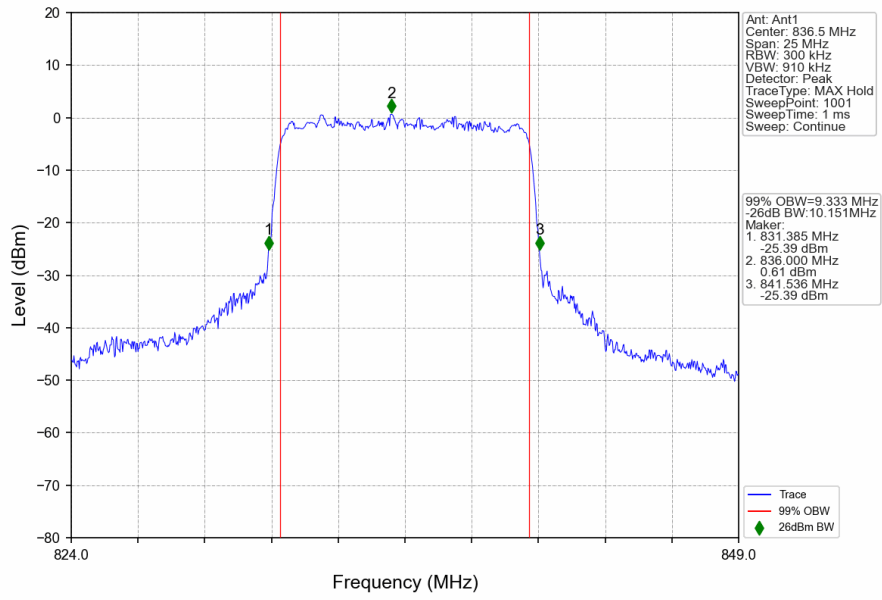
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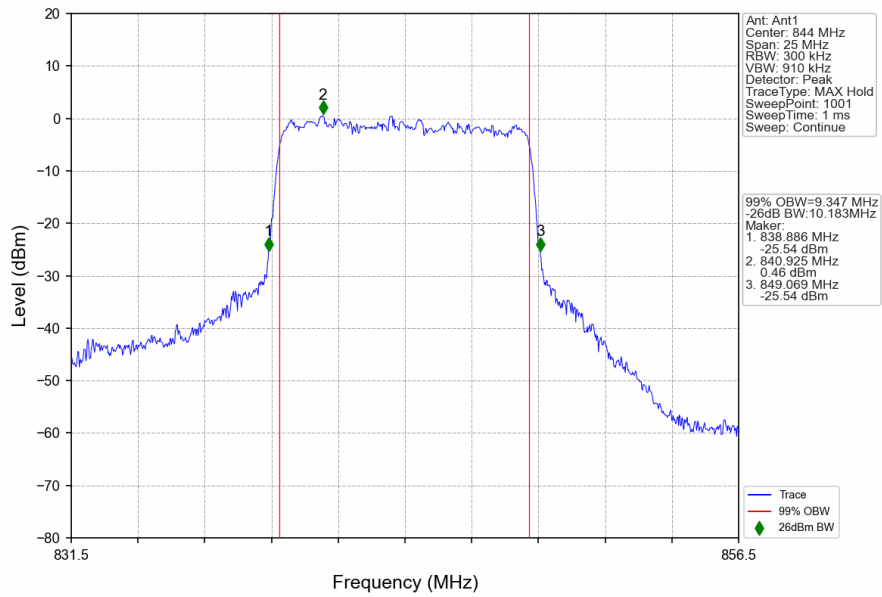
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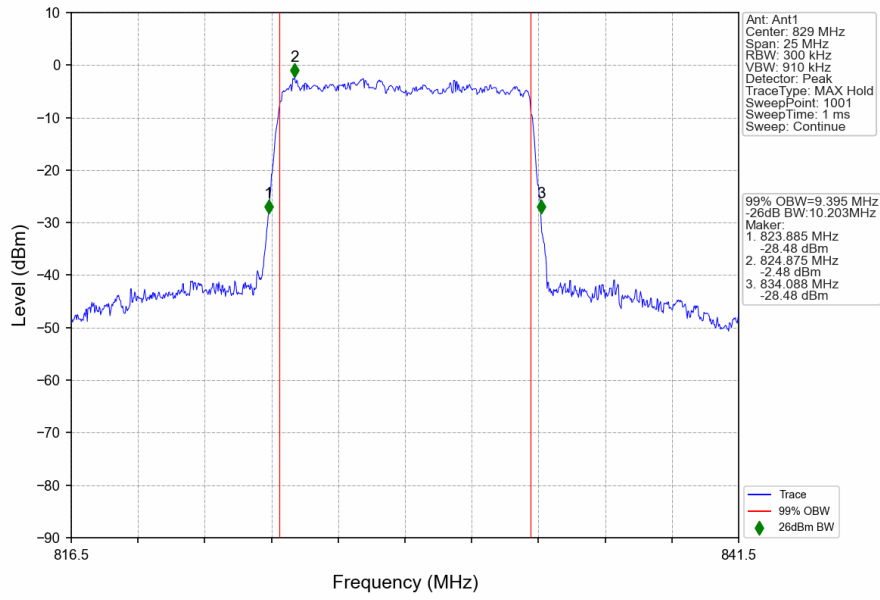
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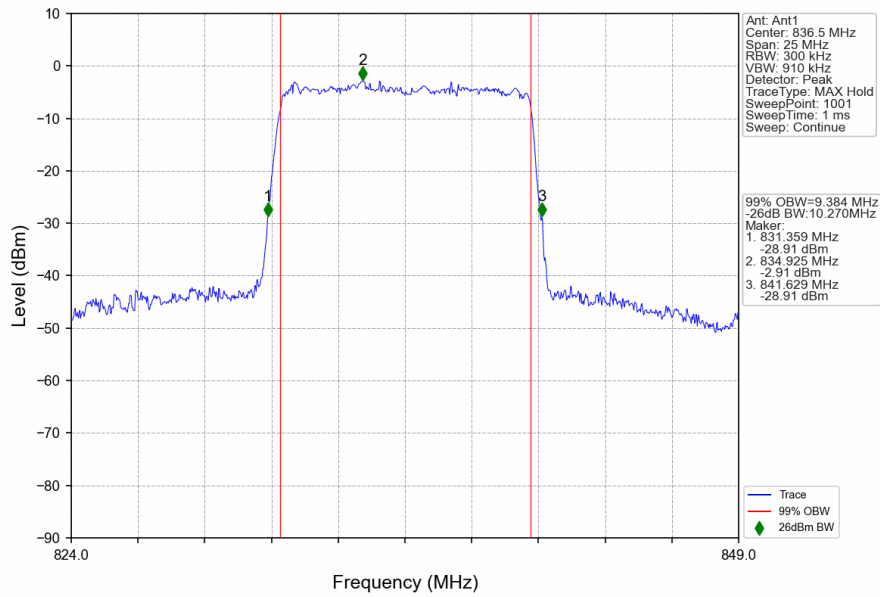
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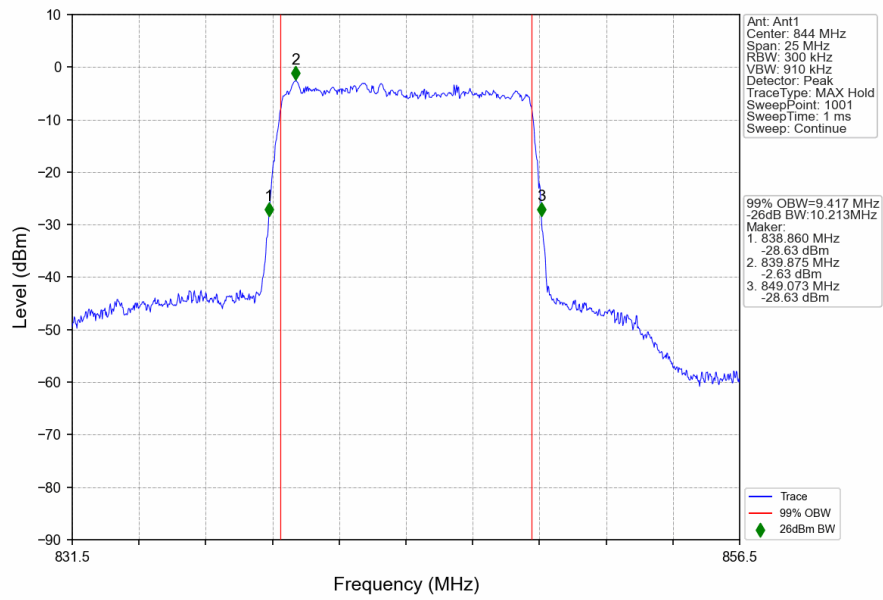
n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM 829MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM 836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM 844MHz_Outer_Full

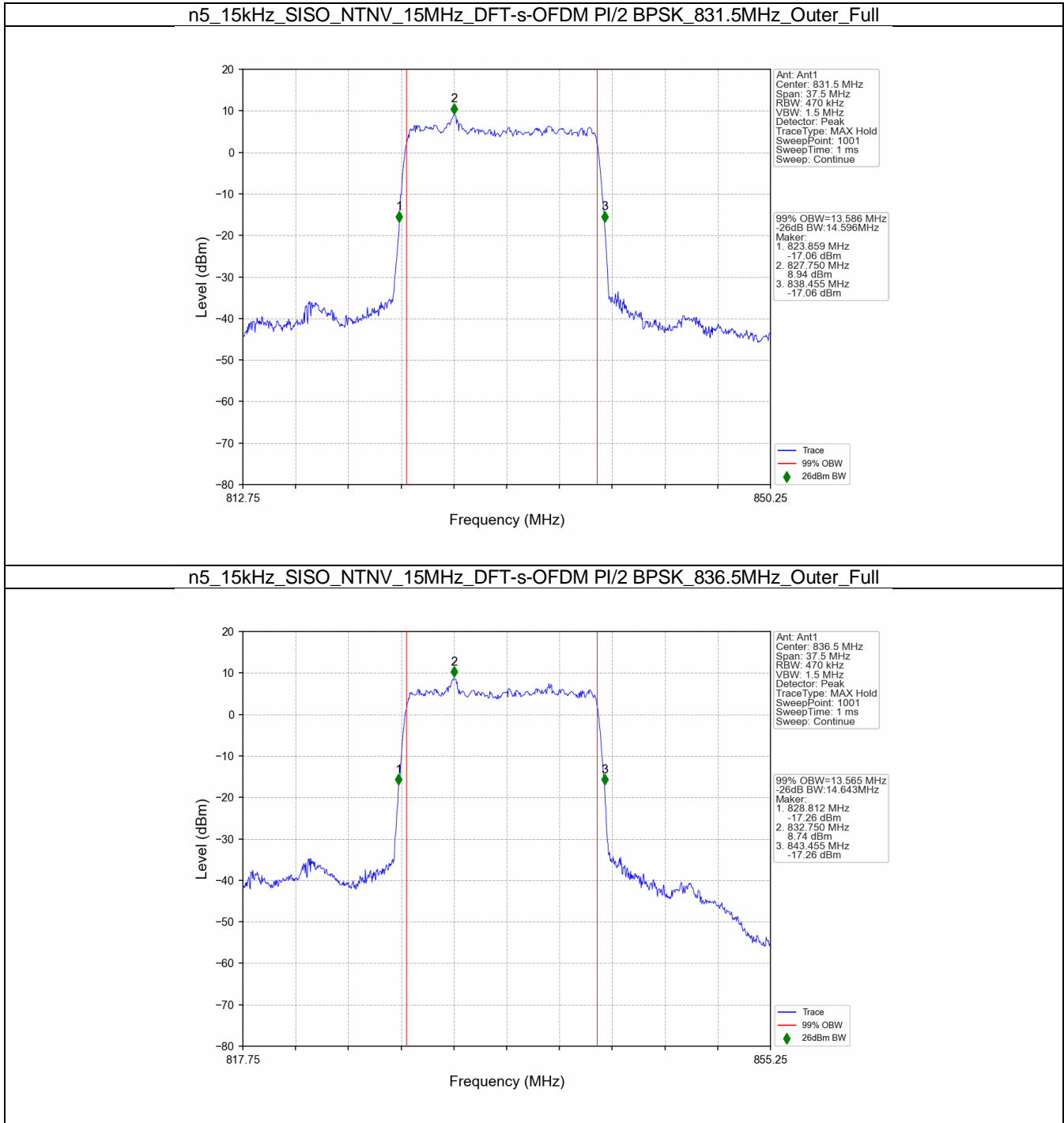


2.3 15k_SISO_15MHz_NTNV

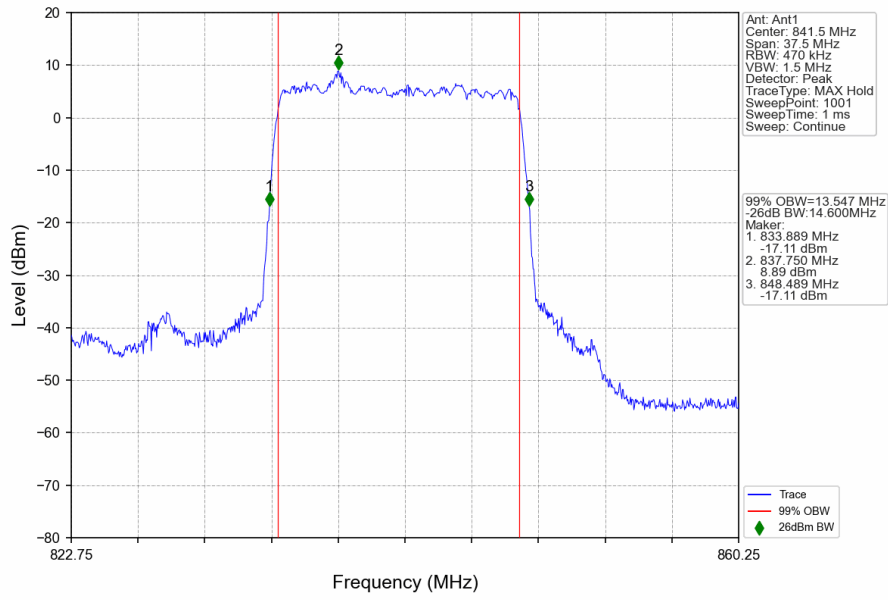
2.3.1 Test Result

5G NR n5 SCS=15kHz SISO 15MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	831.5	Outer_Full	13.59	14.60	/	Pass
	836.5	Outer_Full	13.56	14.64	/	Pass
	841.5	Outer_Full	13.55	14.60	/	Pass
DFT-s-OFDM QPSK	831.5	Outer_Full	13.60	14.65	/	Pass
	836.5	Outer_Full	13.58	14.64	/	Pass
	841.5	Outer_Full	13.58	14.61	/	Pass
DFT-s-OFDM 16 QAM	831.5	Outer_Full	13.65	14.71	/	Pass
	836.5	Outer_Full	13.63	14.66	/	Pass
	841.5	Outer_Full	13.63	14.66	/	Pass
DFT-s-OFDM 64 QAM	831.5	Outer_Full	13.54	14.61	/	Pass
	836.5	Outer_Full	13.52	14.60	/	Pass
	841.5	Outer_Full	13.54	14.67	/	Pass
DFT-s-OFDM 256 QAM	831.5	Outer_Full	13.58	14.61	/	Pass
	836.5	Outer_Full	13.57	14.62	/	Pass
	841.5	Outer_Full	13.57	14.69	/	Pass
CP-OFDM QPSK	831.5	Outer_Full	14.25	15.35	/	Pass
	836.5	Outer_Full	14.25	15.39	/	Pass
	841.5	Outer_Full	14.22	15.29	/	Pass
CP-OFDM 16 QAM	831.5	Outer_Full	14.27	15.33	/	Pass
	836.5	Outer_Full	14.22	15.38	/	Pass
	841.5	Outer_Full	14.26	15.31	/	Pass
CP-OFDM 64 QAM	831.5	Outer_Full	14.30	15.71	/	Pass
	836.5	Outer_Full	14.29	15.74	/	Pass
	841.5	Outer_Full	14.28	15.43	/	Pass
CP-OFDM 256 QAM	831.5	Outer_Full	14.24	15.37	/	Pass
	836.5	Outer_Full	14.21	15.33	/	Pass
	841.5	Outer_Full	14.21	15.30	/	Pass

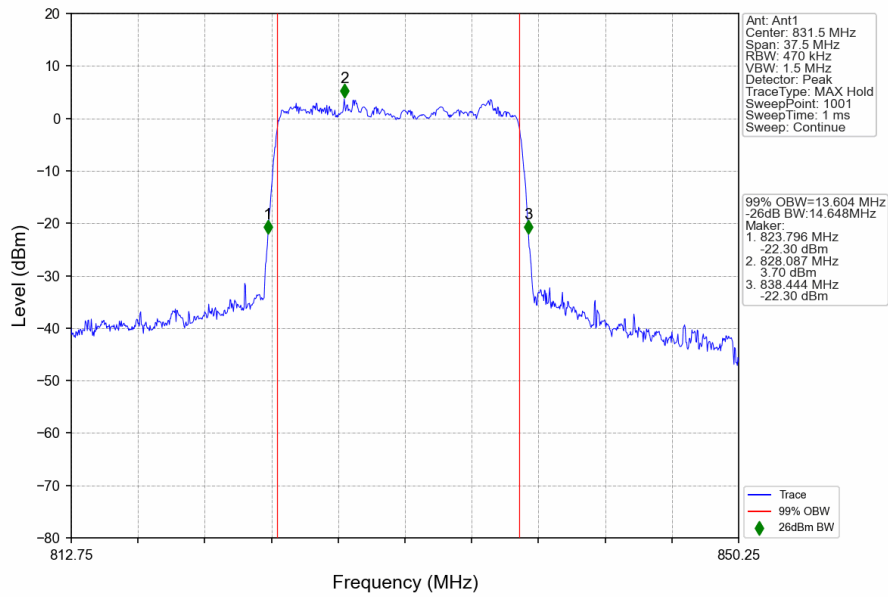
2.3.2 Test Graph



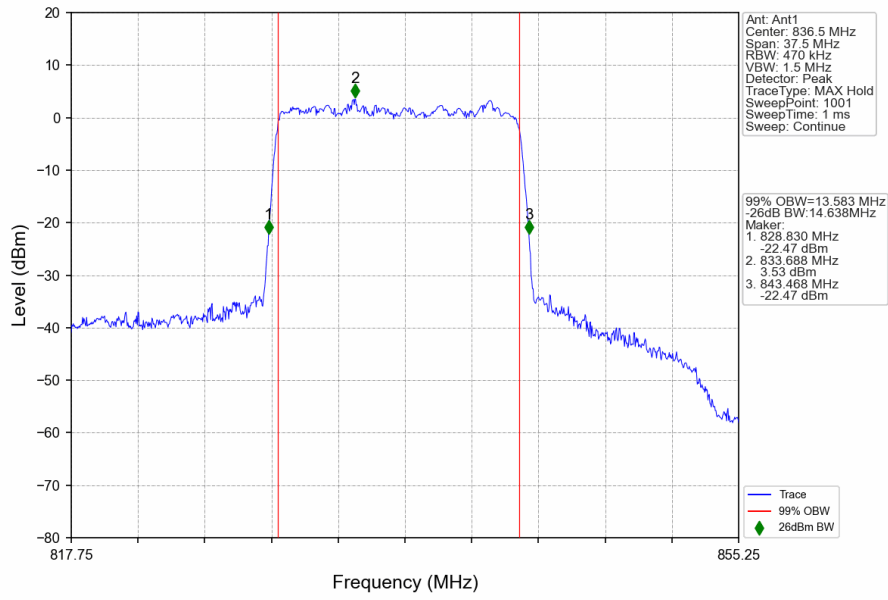
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM PI/2 BPSK_841.5MHz_Outer_Full



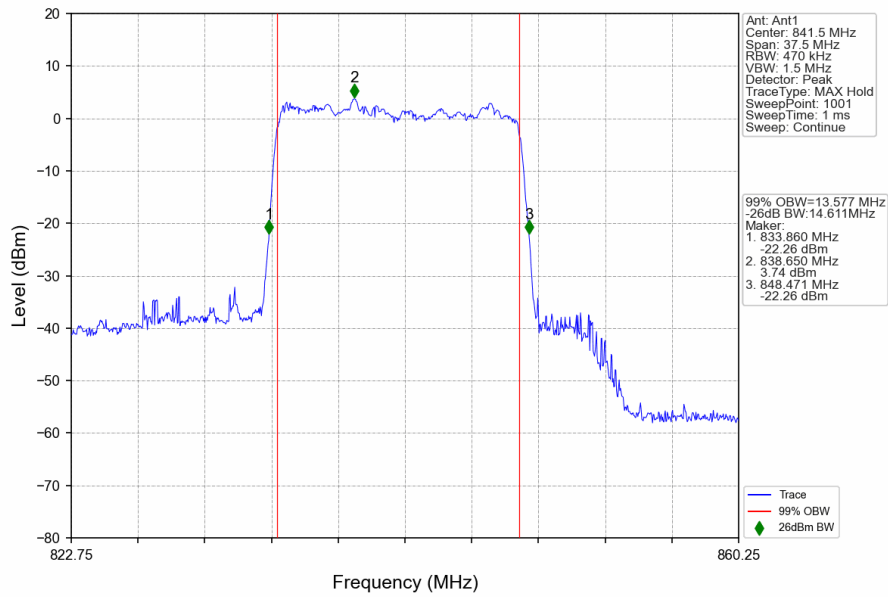
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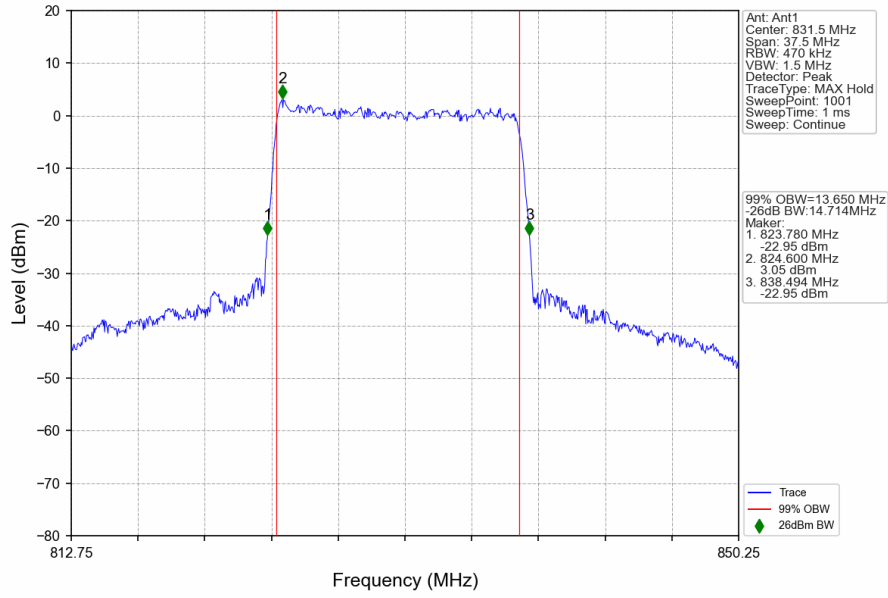
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM QPSK_836.5MHz_Outer_Full



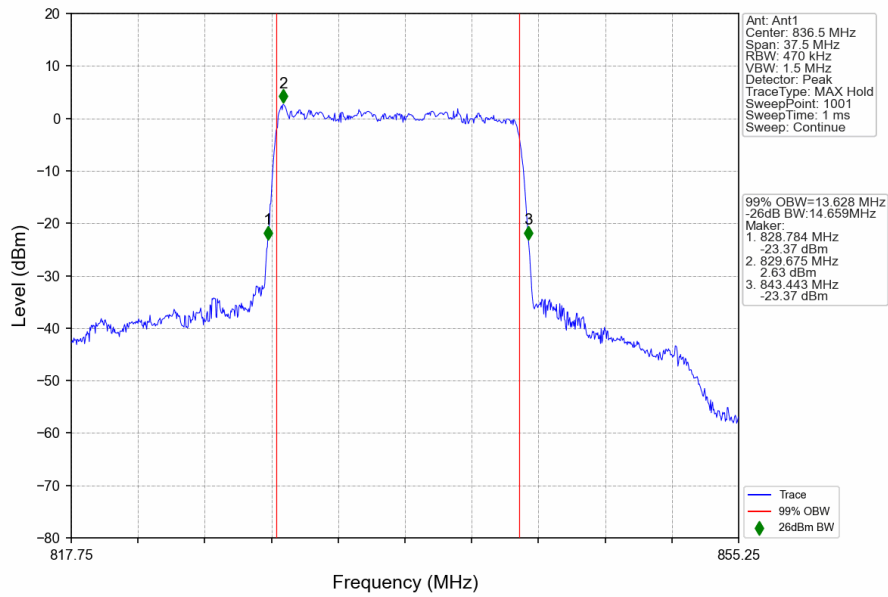
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM QPSK_841.5MHz_Outer_Full



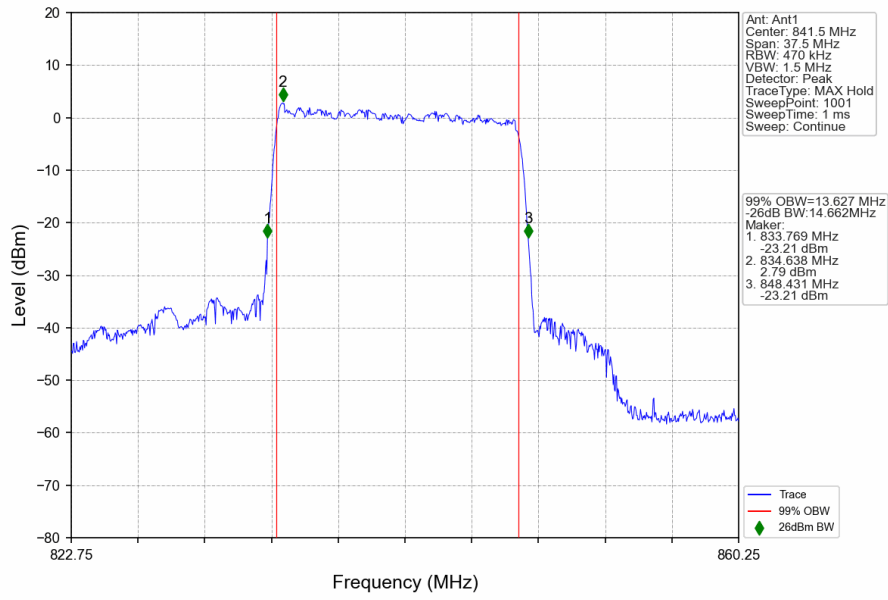
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 16 QAM_831.5MHz_Outer_Full



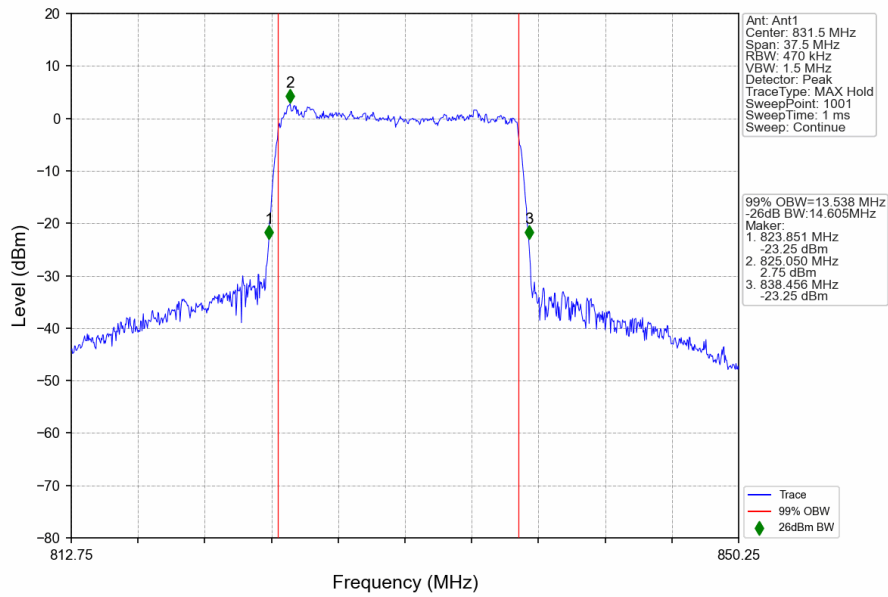
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 16 QAM_836.5MHz_Outer_Full



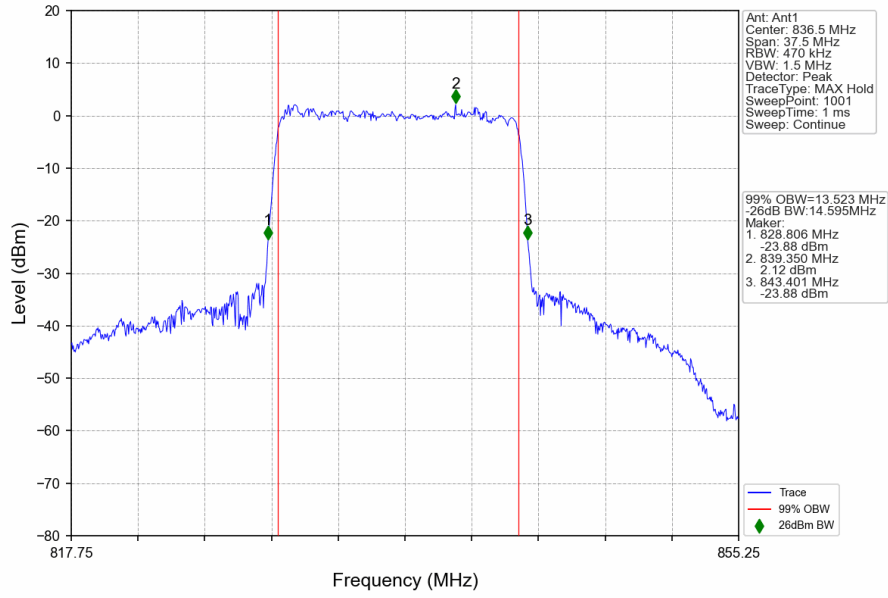
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 16 QAM 841.5MHz_Outer_Full



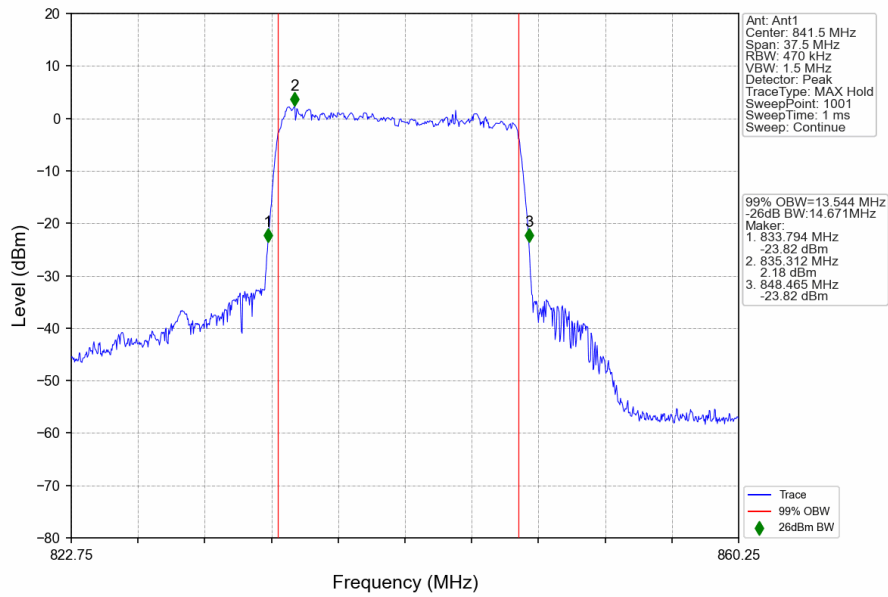
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 64 QAM 831.5MHz_Outer_Full



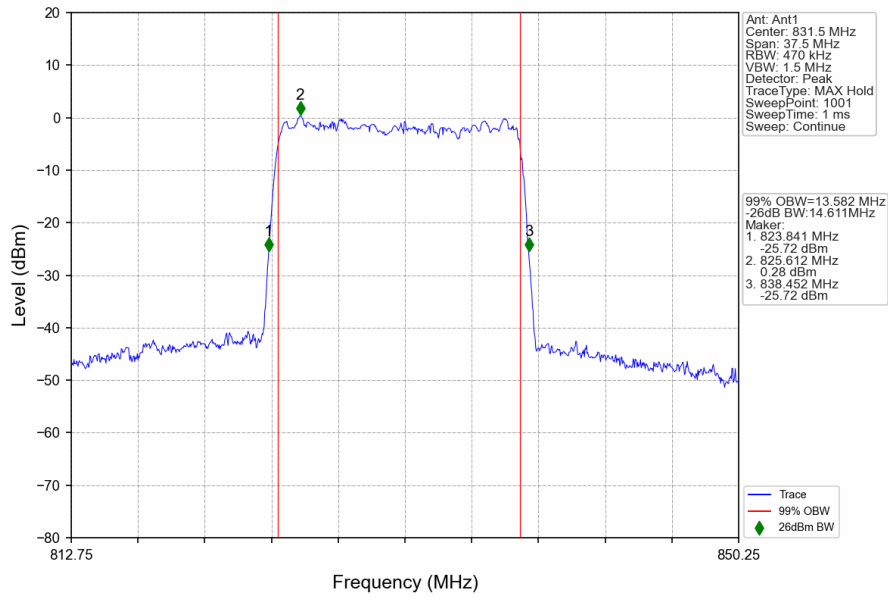
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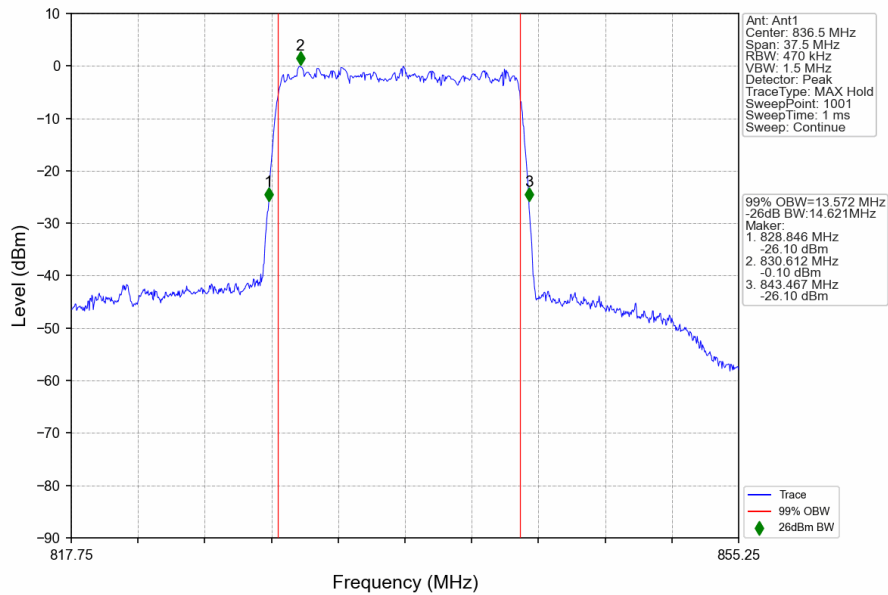
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 64 QAM_841.5MHz_Outer_Full



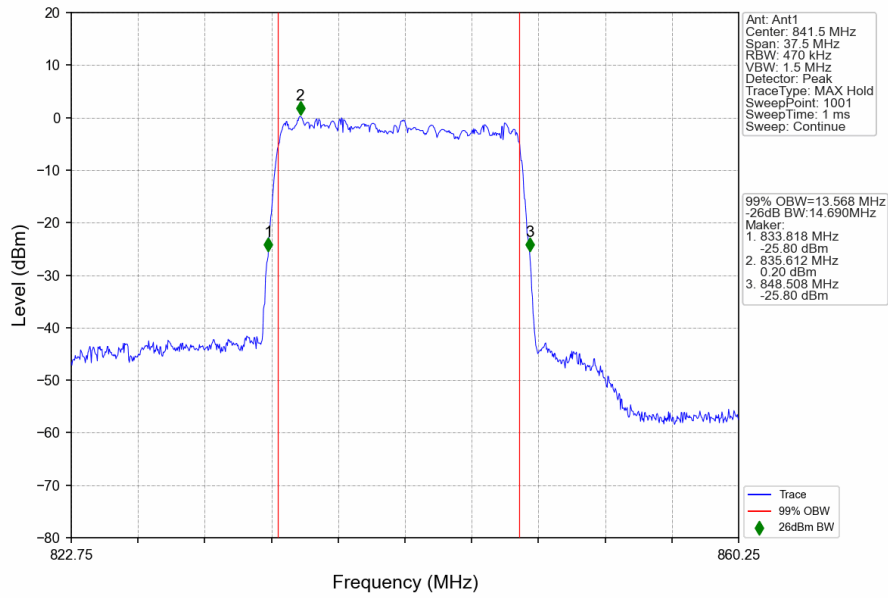
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 256 QAM_831.5MHz_Outer_Full



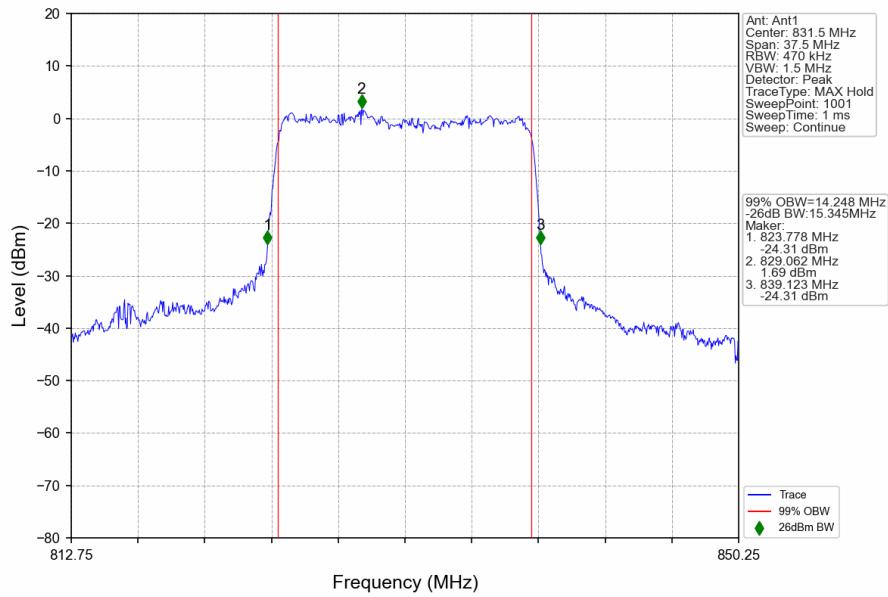
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 256 QAM_836.5MHz_Outer_Full



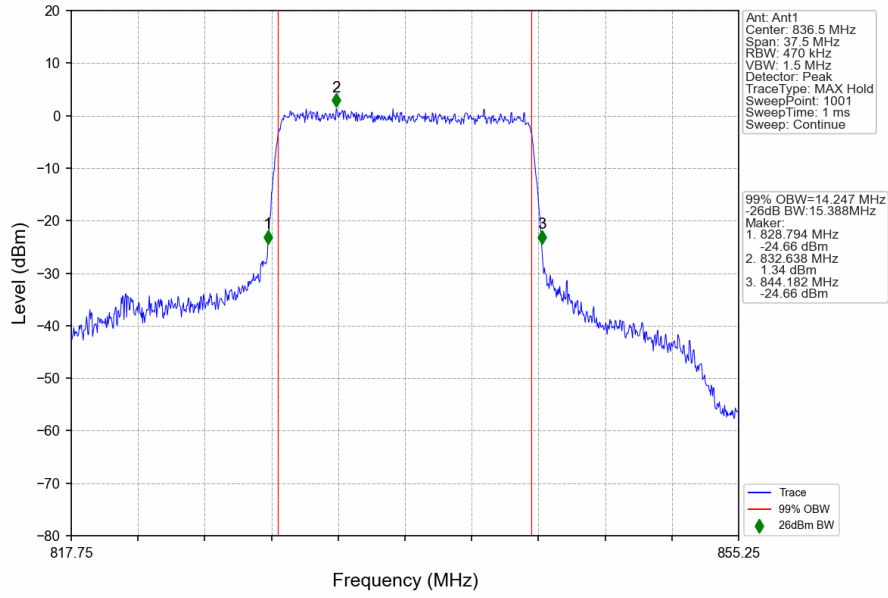
n5_15kHz_SISO_NTNV_15MHz_DFT-s-OFDM 256 QAM_841.5MHz_Outer_Full



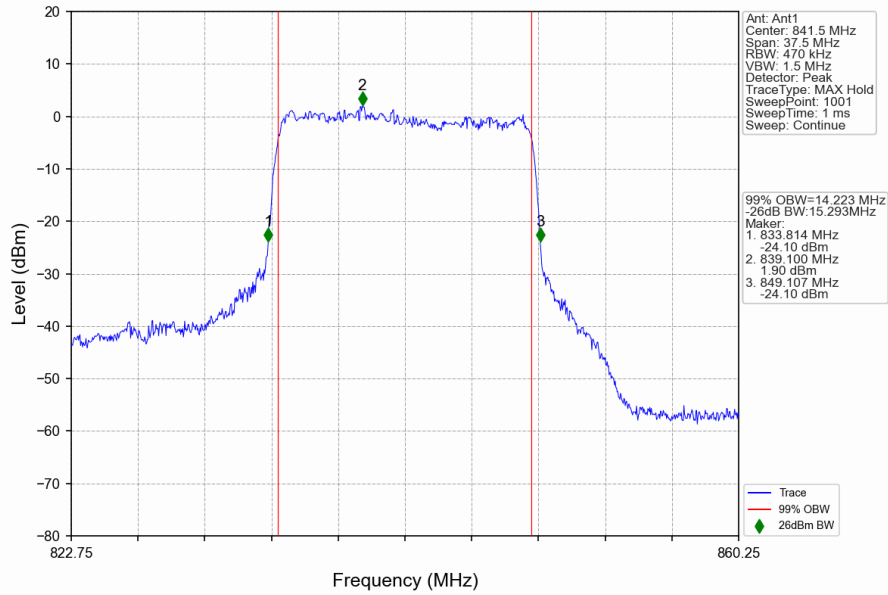
n5_15kHz_SISO_NTNV_15MHz_CP-OFDM QPSK_831.5MHz_Outer_Full



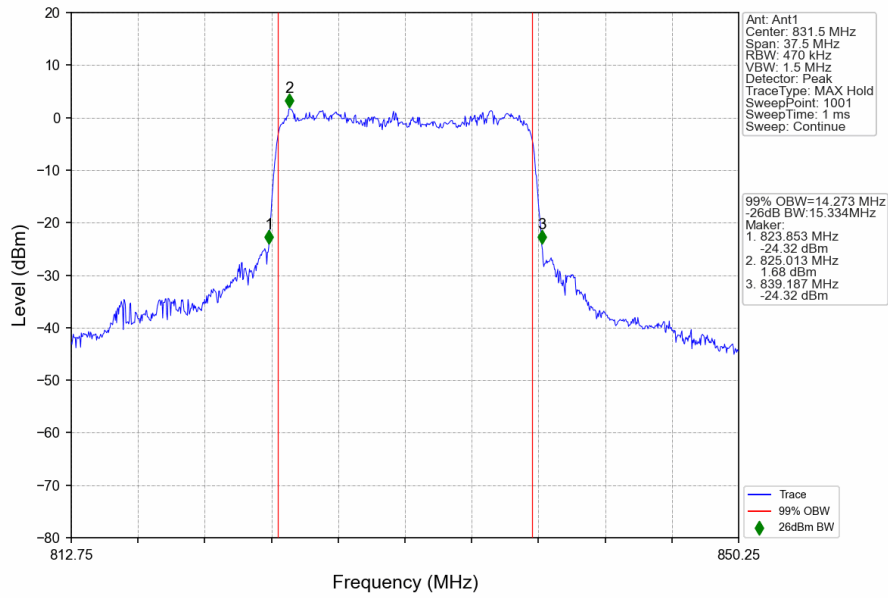
n5_15kHz_SISO_NTNV_15MHz_CP-OFDM QPSK_836.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_15MHz_CP-OFDM QPSK_841.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 16 QAM 831.5MHz_Outer_Full



n5_15kHz_SISO_NTNV_15MHz_CP-OFDM 16 QAM 836.5MHz_Outer_Full

